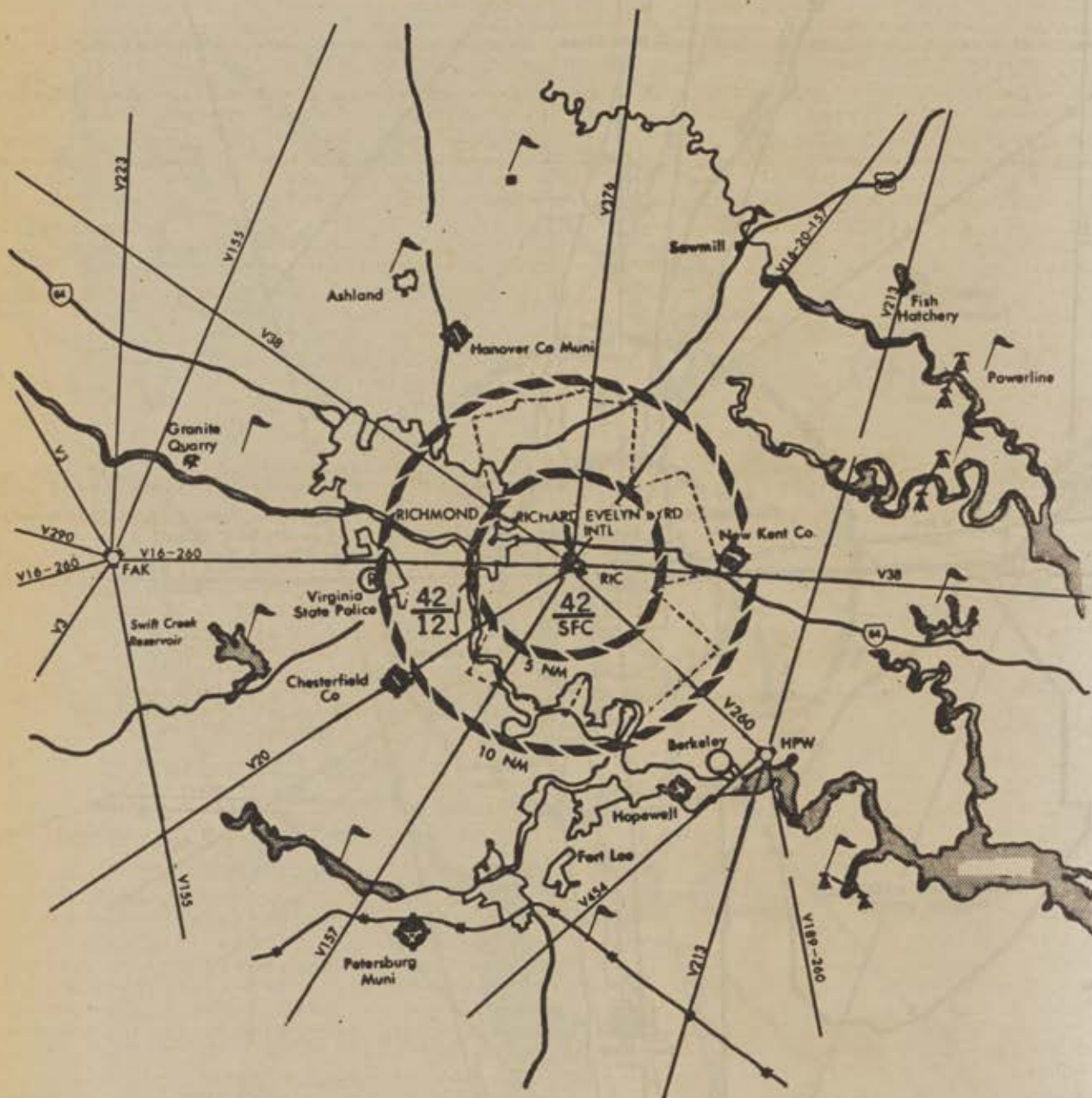


AIRPORT RADAR SERVICE AREA

(NOT TO BE USED FOR NAVIGATION)

RICHMOND, VIRGINIA
RICHARD EVELYN BYRD INTERNATIONAL AIRPORT
FIELD ELEV. 168' MSL



LEGEND

-  VFR CHECKPOINT
-  ARSA
- ALTITUDES ARE MSL
- BEARINGS ARE MAGNETIC

Prepared by the
 FEDERAL AVIATION ADMINISTRATION
 Cartographic Standards Section
 ATO-259

Test Report Federal Register

Friday
August 2, 1985

Part IV

Environmental Protection Agency

40 CFR Part 60

Standards of Performance for New
Stationary Sources; Residential Wood
Combustion; Advance Notice of
Proposed Rulemaking

**ENVIRONMENTAL PROTECTION
AGENCY****40 CFR Part 60****[AD-FRL-2834-3]****Standards of Performance for New
Stationary Sources; Residential Wood
Combustion****AGENCY:** Environmental Protection
Agency (EPA).**ACTION:** Advance Notice of Proposed
Rulemaking.

SUMMARY: This notice announces EPA's plans to develop new source performance standards for the control of particulate matter from residential wood combustion (RWC) devices. The purpose of this advance notice is to advise the public that regulatory activities are being initiated and to solicit information that would aid in standards development.

DATE: Comments. Comments must be received by September 3, 1985.

ADDRESS: Docket. A docket has been established for public comments. Send comments to Central Docket Section (LE-131), West Tower Lobby, Gallery 1, Waterside Mall, 401 M Street, SW., Washington, D.C. 20460, Attention: Docket A-84-49. Comments should be submitted in duplicate if possible.

FOR FURTHER INFORMATION CONTACT: Mr. Kenneth R. Durkee or Mr. Jeffrey A. Telander, Industrial Studies Branch (MD-13), Emission Standards and Engineering Division, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone (919) 541-5595.

SUPPLEMENTARY INFORMATION:**Background**

As of the end of 1983, there were an estimated 10.6 million RWC units in use. As referred to here, RWC units consist of freestanding woodstoves and fireplace inserts and do not include open fireplaces. Annual sales of new RWC units are projected to continue at approximately 1 million units per year. According to information published by the Department of Energy, roughly 60 percent of the RWC units are used as a primary source of heat while 40 percent are used as a secondary source of heat (with oil/gas as the primary source).

Actual emissions from RWC vary greatly depending upon the design and operation of the combustion device plus the type and condition of the fuel. However, data clearly indicate that particulate matter (PM) which includes polycyclic organic matter (POM), carbon monoxide (CO), and hydrocarbon (HC)

emissions are substantial from RWC appliances. These appliances, unlike open fireplaces, contain an enclosed firebox where the air supply can be easily controlled, thus controlling the rate of wood combustion. To obtain desired heat outputs at low burn rates, the combustion process is "starved" of air (and thus oxygen). However, less oxygen not only slows the burn rate, but can also prevent complete combustion, causing significant emissions of products of incomplete combustion such as PM, CO, HC, and POM.

Presently, RWC contributes the following estimated annual emissions: PM—2.7 million tons, including POM—20,000 tons; CO—7.4 million tons; HC—62,000 tons. If the sales of RWC units continue at 1 million units each year, annual emissions are estimated to increase by the following amounts if not controlled: PM—216,000 tons, including POM—1,600 tons; CO—584,000 tons; HC—5,000 tons. Thus, by the year 2005, uncontrolled annual emissions from RWC units are estimated to total the following amounts: PM—7 million tons; CO—19 million tons; HC—159,000 tons; and POM—52,000 tons.

More than 80 percent of the PM emissions from RWC are smaller than 2.5 micrometers and almost all are less than 10 micrometers. Particulate matter of this size is considered respirable (they penetrate to the tracheo-bronchial and alveolar regions of the lung). Deposition in this region of the lung is of concern because the body may take years to remove the particles and repair the damage they cause. Exposure can increase coughing and chest discomfort, aggravate cardiovascular diseases, and may increase the adverse health effects of gaseous air pollutants.

Significant air quality problems are caused by RWC in localities where the number of wood burning devices are high. Emissions from RWC are a growing problem throughout all areas of the country where wood supplies are abundant. In fact, several areas are currently violating national ambient air quality standards (NAAQS) for PM and CO due to RWC. One study of ambient total suspended particulate (TSP) levels at seven sites in Oregon, Washington, and Idaho during the winter of 1980-81 estimated that during periods of high pollution in these communities, RWC was responsible for between 66 and 84 percent of the small respirable particulates (particles smaller than 2.5 micrometers).

Several areas in the Rocky Mountain region also are experiencing air quality problems partly or wholly attributable to RWC. These include Denver, Colorado; several ski resort

communities in Colorado; and Missoula, Montana.

In Missoula, Montana, emissions inventory and direct sampling methods were used to determine that RWC was responsible for 54 percent of PM emissions and 39 percent of CO emissions during the winter. Also, an estimated 68 to 76 percent of the smaller, respirable particulates were found to be attributable to RWC. Surveys and modeling studies in Bangor, Maine; Chattanooga, Tennessee; and the State of New Hampshire suggest significant emissions and high air quality impacts due to RWC. In addition the following metropolitan areas have similar ambient air quality problems due to RWC: Medford, Oregon; Juneau, Alaska; Reno, Nevada; and Albuquerque, New Mexico.

The vast majority of the areas that are experiencing air quality problems due to RWC are urban areas. Thus, large numbers of people are being directly exposed to residential wood pollutants which are emitted at ground level.

Control Technology

There are two types of technology, noncatalytic and catalytic, that can be utilized to control emissions from RWC. The term "noncatalytic" refers to RWC units that have secondary combustion chambers or other stove modifications designed to control emissions. Secondary combustion can be achieved by mixing unburned gases from the primary combustion area with additional oxygen at a temperature sufficient to ignite the mixture or sustain burning. The emission reduction performance of RWC units equipped with secondary combustion controls can be highly variable. Performance varies with the burn cycle and operator attention.

The term "catalytic" refers to a RWC unit that is equipped with a catalytic combustor. The catalyst used on the combustor is a thin metal coating (usually platinum, palladium, or a combination) that allows nearly all the hydrocarbons and other flammable products in the smoke to burn at a temperature much lower than usual. In contrast to noncatalytic RWC units, a catalytic unit is most efficient at low firing rates. In addition, researchers have found that catalysts increase the thermal efficiency of a conventional RWC unit by 26-30 percent. This results in the user having to burn less wood in order to obtain the same amount of heat and, therefore, lowering fuel costs. Also, the catalyst greatly reduces creosote accumulation in the flue, thus reducing the potential for chimney fires. The

frequency of chimney cleaning is, therefore, also reduced which translates into additional cost savings.

Research has shown that RWC devices are generally operated at low burn rates, and it is at these burn rates that the largest amount of pollutants are produced. Research has shown that both catalytic and noncatalytic control technology are capable of reducing PM including POM, CO, and HC. Data from tests conducted on RWC devices equipped with noncatalytic control technology indicate that this technology is capable of controlling PM emissions at medium and high burn rates. Unfortunately, this control technology does not appear to be capable of controlling PM emissions at low burn rates. On the other hand, RWC devices equipped with catalytic control devices appear to control PM emissions over all burn rates. There is some concern about catalyst longevity. However, catalyst manufacturers are continuing their development efforts; and presently one catalyst manufacturer is producing a catalyst for which they offer a prorated 6-year limited warranty with 2 years free replacement. This particular catalyst has an expected operational life of about 12,000 hours.

The cost increase of incorporating catalytic or noncatalytic control technology into new RWC devices is estimated to be approximately \$200-\$300 per unit. Replacement costs for catalytic combustors are estimated to be \$50-\$100.

Regulatory Activity

Regulations of varying stringency have been or are being adopted by some local and State governments. Certain communities require curtailment of wood burning when an air stagnation advisory is declared, whereas other communities have voluntary burning restrictions. In July 1984, the State of Oregon issued regulations which require all new RWC devices (free standing and fireplace inserts) sold in the State after June 1986 to meet the following PM emission standards: noncatalytic—15 grams of particulate per hour; catalytic 6 grams of particulate per hour. Oregon's Department of Environmental Quality (DEQ) estimates this represents approximately 50 percent particulate emission reduction when compared to conventional RWC devices. This standard changes on July 1, 1988, to the following: noncatalytic—9 grams per hour; catalytic—4 grams per hour. According to Oregon's DEQ, this standard represents approximately 80 percent particulate emission reduction when compared to conventional RWC devices. Compliance with this regulation

is voluntary until June 1986. Oregon's regulation requires the manufacturer of RWC devices to have a representative of each model they wish to sell in Oregon tested by a laboratory accredited by the State. Thus far, Oregon has accredited one in-State laboratory and is in the process of reviewing an application from an out-of-State laboratory. Presently, Oregon has certified nine stove models, six noncatalytic and three catalytic.

Other States are also considering establishing emission limits. For example, the Colorado legislature has authorized the State Environmental Commission to establish statewide emission standards for RWC units. In addition, Massachusetts is considering regulating emissions from RWC devices.

Test Methods

Presently, there is no universally accepted method to measure emissions from a RWC unit. While developing emission limits for RWC units, Oregon also developed a test method. This test method is called Oregon Method 7. The EPA is currently using a modified Method 5 for research efforts to investigate emissions from RWC devices. A description of the modified method 5 sampling procedure is included in the docket. The American Society for Testing and Materials (ASTM) is in the process of developing a test method for RWC units which is slated to be released during the summer of 1985 on a provisional status.

Regulatory Approach

The EPA has concluded that a program to establish a Federal standard for RWC units is warranted and has begun gathering existing information on emissions, control technologies, test methods, certification procedures, and costs. The Agency is considering an expedited standards development approach based on the available data. The Agency will consider various emission limits, test methods, and certification procedures, including those of the State of Oregon. This approach has a number of advantages, foremost of which is achieving emission reductions up to 2 years sooner than under the Agency's traditional standard-development process. At a current sales rate of about 1 million units per year, this would mean control for an additional 2 million units and additional reduction in PM emissions of about 216,000 tons/yr. Other advantages include encouraging quicker development of more effective control techniques, quicker public awareness and education on the impacts and benefits of control and less cost to

develop a standard. The EPA believes that the available emission control information is adequate to develop and set PM standards for new fireplace inserts and freestanding RWC units.

The more traditional standard-setting approach would include reference test method development, emission measurements with the test method, evaluation of the effectiveness of catalysts over long-term use, and a more detailed economic analysis. More specifically, in contrast to the expedited approach, the Agency would develop a test method and conduct its own independent testing of RWC units to quantify emissions and determine performance of control technology. The EPA-conducted tests with a single test method would quantify other pollutants in addition to PM, such as HC, and CO, and the ability to reduce these with different control techniques, on a consistent and repeatable basis. Test data on more types of units, reflecting the diversity of design, could be gathered as well as possibly expanding the scope of the standards to also include furnaces and fireplaces. More data on catalyst longevity would be available for consideration in setting the standard. A more comprehensive economic analysis could be performed by gathering more information on the economics that affect manufacturers and users of RWC units, thus enabling EPA to analyze a greater number of structural and usage subcategories for the RWC source category.

As noted above, the Agency believes that such a lengthy and detailed standard-development program is not needed for wood combustion units because an adequate data base for standards appears to be available. Developing standards on this basis is not expected to disrupt the availability of wood combustion units to the consumer; it is recognized, however, that a standard, whether developed rapidly or over a longer schedule, may result in the need for some manufacturers to redesign their products or to discontinue sales.

The two approaches involve important trade-offs. The Agency has made a preliminary decision to pursue the expedited approach, but is soliciting comments on the relative advantages and disadvantages of each. In several months, the Agency will make a final decision on the standard-setting approach to this source category, based on the amount and quality of available test data, environmental impacts of earlier control, applicability of control techniques and test methods, implementation and enforcement

considerations, cost of developing and implementing standards, and information and data gathered as a result of this notice.

The Agency is also seeking information and data on the technical, cost, economic, implementation, and benefits aspects of regulating RWC units. Of technical interest are emission and performance data for catalytic and noncatalytic control technologies during the entire operating cycle of the units. This includes catalyst longevity and emission reduction capabilities for particulates, carbon monoxide, and organics over several heating seasons, types or catalysts and configurations, causes of catalyst degradation, specific guarantees and conditions by catalyst manufacturers, operating and physical factors (such as air flow, humidity, type of wood, etc.) that affect combustion and pollutant formation, and design criteria for RWC units that incorporate either catalyst or noncatalyst control technology. The Agency seeks information and data on the accuracy, reproducibility, and comparability among all existing particulate test methods, including Oregon Method 7, the ASTM method, and the EPA Modified Method 5 and their ability to rank stoves according to their emission of PM including POM, and hydrocarbons. The EPA is interested in cost increases to the manufacturer and consumer of applying the various emission control techniques to RWC units. In addition, the EPA is interested in the cost benefit to consumers due to reduced wood consumption, reduced creosote formation, and greater operational safety. Other costs of interest are those related to emission testing, standards implementation, and enforcement. To analyze the economic impacts, EPA is soliciting the following information on businesses that manufacture and/or sell RWC units: firm sizes (employment, annual sales, and number of plants); production capacity and capacity utilization over the last few years; age and remaining lifetime of plants; how production line changes needed to produce controlled units would be financed; competitiveness of the market, and

whether firms compete for sales in small geographic areas or in a national market; the mix of imported and domestic materials used in manufacturing the units; how many units are exported; and what prices firms charge (list and discounted prices and shipping costs). The EPA also is soliciting the following economic information on consumers: geographical distribution (for climate data); type of consumer (residential, commercial); how the consumer uses RWC units (primary or supplemental heat, water heating, cooking); alternative heating sources available to the user; initial capital and operating costs; time and money spent obtaining and preparing fuel, and cleaning the units; operating hours during each season of the year; and how much wood is consumed each season. Also of interest is information regarding the practicality of implementation of any regulations for RWC units, including catalyst availability, standards enforcement, certification, and labelling on units. Finally, the Agency is soliciting information on the beneficial aspects of RWC regulation, including impacts on emissions, visibility, odor, ozone formation, mortality, morbidity, agriculture, materials, indoor air quality, and the benefits or reduced creosote formation (thus fewer chimney fires and cleaning), and improved heating efficiency of the units.

The Agency does not intend that the proposed rulemaking preclude State and local control agencies from developing their own emission control regulations and certification procedures for RWC units. To assist State air pollution control agencies and others interested in control of RWC emissions, the Agency will share the information obtained through responses to this notice or obtained from other sources.

The Agency is aware that there are systems available which allow catalytic combustors to be retrofitted to existing RWC units. However, not all RWC units are capable of being retrofitted due to the many different unit designs, space limitations, and potential conflicts with existing safety regulations and building codes. Also, there are questions concerning the stove-to-stove

performance of retrofit catalysts due to issues regarding flame impingement and the inability to optimize that catalyst inlet configuration on retrofit applications. Furthermore, the Agency believes that it would not be feasible to administer and enforce a regulation for retrofit of existing stoves on a national basis. Implementation of such a regulation would require that over 10 million existing stoves in private residences be located. In addition, each unit would have to be evaluated to determine if a retrofit system would be compatible. Enforcement and administration of a program for retrofitting existing stoves on a national basis would be resource intensive and extremely difficult to implement. Therefore, development of a standard for existing units is not being considered at this time. In the future, in order to provide guidance to State and local agencies, the Agency may develop a guideline document on retrofitting catalytic, or other controls, to existing units. Therefore, the Agency is soliciting comments on this issue and on the availability, applicability, safety aspects, and performance of retrofit control technology and the costs associated with retrofitting existing units.

Miscellaneous

A regulatory flexibility analysis under 5 U.S.C. 601, et seq., is not required for this notice. This notice would not impose any new regulatory requirements, nor would it impose any additional costs. This notice is also considered nonmajor under Executive Order 12291.

List of Subjects in 40 CFR Part 60

Air pollution control, Intergovernmental relations, Paper and paper products industry, Incorporation by reference, Reporting and recordkeeping requirements.

Dated: July 25, 1985.

Lee M. Thomas,
Administrator.

[FR Doc. 85-18113 Filed 8-1-85; 8:45 am]

BILLING CODE 6560-50-M

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for

the

Federal

Friday
August 2, 1985

Part V

Department of Transportation

Federal Railroad Administration

**49 CFR Parts 212, 217, 218, 219, and 225
Control of Alcohol and Drug Use in
Railroad Operations; Final Rule**

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Parts 212, 217, 218, 219, and 225

[FRA Docket No. RSOR-6, Notice No. 7]

Control of Alcohol and Drug Use in Railroad Operations; Final Rule and Miscellaneous Amendments

AGENCY: Federal Railroad Administration (FRA), DOT.

ACTION: Final rule.

SUMMARY: FRA issues a final rule on control of alcohol and drug use in railroad operations. The final rule prohibits on-the-job use, possession, or impairment by alcohol or any controlled substance, mandates post-accident toxicological testing after certain serious accidents and incidents, authorizes railroads to require breath and urine tests on reasonable cause, requires railroads to adopt policies to aid in the identification of troubled employees, provides for pre-employment drug screens, and requires more complete reporting of alcohol and drug involvement in train accidents. FRA also issues miscellaneous amendments necessary to implement the new regulatory program.

DATES: Effective Date: November 1, 1985 except amendment to 49 CFR 225.17, which is effective January 1, 1986.

Dates: (1) Compliance with post-accident testing requirements is authorized on and after the effective date and is mandatory beginning on December 1, 1985. Compliance with requirements for pre-employment drug screens is authorized on and after the effective date and is mandatory beginning on March 1, 1986. All other provisions are fully operative on the effective dates (November 1, 1985, for new Part 219 and amendments to Parts 212, 217, 218; January 1, 1986, for amendment to Part 225).

(2) Any petition for reconsideration of any portion of the rule must be submitted not later than October 1, 1985.

(3) In a subsequent notice to be published shortly, FRA will announce the dates of conferences to be held in several cities for the purpose of acquainting the railroads, employees and other interested persons with the requirements of the rule.

ADDRESSES: (1) Any petition for reconsideration should be submitted to the Docket Clerk (RCC-30), Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Washington, D.C. 20590.

(2) The docket of this rulemaking is available for examination during regular

business hours in Room 8201 of the Nassif Building at the above address. Please note that this reflects a change in the location of the docket facility.

FOR FURTHER INFORMATION CONTACT: Walter Rockey, Executive Assistant to the Associate Administrator for Safety, FRA, Washington, D.C. 20590 (Telephone: 202-426-0895); or Grady Cothen, Special Assistant to the Chief Counsel, FRA Washington, D.C. 20590 (Telephone: 202-426-9416).

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Abbreviations and Definitions

The following abbreviations and specialized terms are used with some frequency in this preamble and are collected here for the convenience of the reader:

AAR—Association of American Railroads.

AMA—American Medical Association.

ATDA—American Train Dispatchers Association.

BAC—Blood alcohol concentration, expressed as a "percentage" weight (in grams) to volume (100 milliliters). A BAC of .10, for instance, means that .10 gram of alcohol is present in each 100 milliliters (or one deciliter) of whole blood. The most

common alternate way of stating the same concentration is by "milligrams percent" (milligrams per 100 milliliters), in which case the same BAC would be reported as "100 milligrams percent." BAC may be measured directly or estimated from concentrations in breath, urine, or other samples.

BLE—Brotherhood of Locomotive Engineers.

CAMI—Civil Aeromedical Institute, Federal Aviation Administration, Oklahoma City, Oklahoma.

EAP—Employee assistance program. A program established by the employer to help employees who are experiencing substance abuse or other personal problems that may ultimately affect their performance on the job. Some EAPs also serve members of employees' families.

NARUC—National Association of Regulatory Utility Commissioners.

National Planning Committee—A committee established jointly by rail labor, the railroads, and FRA for the purpose of fostering prevention efforts in the field of alcohol and drug abuse. Consists of a steering committee and a working group.

NIDA—National Institute on Drug Abuse.

NRAB—National Railroad Adjustment Board.

NTSB—National Transportation Safety Board.

REAP Report—Report of the Railroad Employee Assistance Project. Mannello, T.A., and Seaman, F.J., *Prevalence, Costs and Handling of Drinking Problems on Seven Railroads* (University Research Corporation 1979).

RLA—Railway Labor Executives Association. RLA is an "umbrella" organization for the traditional rail unions representing a large majority of rail employees in the United States.

Rule G—The railroad operating rule that prohibits use of alcohol or drugs by employees on duty or subject to duty. All railroads have such a rule in effect.

UTU—United Transportation Union.

Introduction**Preface**

This final rule culminates a rulemaking process that began with issuance of an Advance Notice of Proposed Rulemaking (ANPRM) on June 30, 1983 (48 FR 30723; July 5, 1983). On June 5, 1984, FRA issued the NPRM (49 FR 24252; June 12, 1984), which was followed by five days of public hearings, a technical conference on post-accident testing, and receipt of written comments through the comment closing period of August 15, 1984. Since the comment closing date, FRA has continued to receive related materials and views. Consistent with our practice to consider late-filed comments to the extent practical, FRA has considered all comments received through March 31, 1985 in preparing this final rule.

The ANPRM and NPRM discussed in considerable detail the regulatory

options available to FRA, public response to those options, the background of the alcohol and drug problem on the railroads, current approaches to the problem by the railroads and employee organizations, relevant accident and injury statistics, and the Federal responsibility for promoting railroad safety. In order to provide a reasonably complete explanation of the rationale for the final rule in a single document, this preamble repeats a portion of the explanation and analysis contained in the NPRM, with appropriate modifications in light of comments received and developments noted in the industry since publication of the NPRM.

Background

The problem of alcohol use on the railroads is as old as the industry itself, and efforts to deal with it through carrier rules and enforcement began more than a century ago. In recent years the railroads have augmented traditional rule compliance efforts by establishing EAPs designed to reach employees whose drinking is compulsive or symptomatic of other, treatable problems. However, all efforts to control the alcohol problem, and the newer problem of drug abuse, have failed to end the loss of life and property damage associated with alcohol and drug-impaired employees.

The railroads are the only major domestic transportation mode without explicit Federal regulations governing alcohol or drug use. The Department of Transportation's Federal Highway Administration and Federal Aviation Administration administer provisions governing on-duty use of alcohol and drugs as well as medical certification programs that provide for the disqualification of flight crew members and truck drivers who suffer from alcohol or drug dependencies. The States also enforce criminal statutes forbidding the operation of private motor vehicles while under the influence of alcohol or drugs. By contrast, prior to this final rule there has been no Federal prohibition on alcohol or drug use by railroad employees engaged in safety-sensitive functions; and no State has had an active program of regulation.

Therefore, on June 30, 1983, FRA issued an ANPRM concerning the control of alcohol and drug use in railroad operations. That notice provided background on industry efforts to deal with the alcohol and drug problem. The ANPRM also included a discussion of—

- The Railroad Employee Assistance Project (REAP), a joint labor-management-FRA effort to define the

extent of the alcohol problem on the railroads and develop recommendations for corrective action.

- The report of that project (the "REAP Report"), which compiled data from a 1978 survey of several thousand employees on seven railroads and set forth analysis and recommendations.

- Developments since the REAP Report, including an update (White Paper) published in June of 1982 and the emergence of Rule G "bypass" agreements.

The ANPRM set forth a wide range of options for action to address the alcohol and drug problem and invited views on the listed options and any other approaches that might prove useful in reducing alcohol and drug-related accidents.

Following publication of the ANPRM on July 5, 1983, FRA conducted five days of public hearings to elicit information and views. Hearings were held in Atlanta, Georgia, on July 25, in Kansas City, Missouri, on July 26, in Sacramento, California, on July 28, and in Washington, D.C., on September 1 and 2, 1983. A total of 57 individuals or organizations were represented by oral or written submissions. FRA received oral or written viewpoints from 19 employee sources (from the national level to individual union members), 20 railroads, 5 State and local government sources (one of which expressed the views of 21 State agencies), 14 private organizations and non-rail companies, 6 individual citizens, and 3 Federal agencies. In some cases, a single organization offered more than one witness and also filed more than one written submission.

Elements of the NPRM

FRA review of the responses to the ANPRM led to the identification of six regulatory proposals which were embodied in the NPRM. In particular, FRA proposed to—

- Specifically prohibit the use of alcohol and drugs by employees directly connected with rail operations (Hours of Service employees) and impose on the railroads an obligation to assure compliance with that prohibition;

- Require toxicological testing of employees involved in major accidents and incidents;

- Require that pre-employment physicals of applicants for employment in Hours of Service positions include a urine drug screen;

- Authorize the railroads to test employees for alcohol or drugs on reasonable suspicion of impairment, after accidents and injuries, and after serious operating rule violations;

- Require the railroads to institute policies that will promote the early identification of problem drinkers and drug users; and

- Require more complete reporting of alcohol and drug involvement in train accidents.

Public Proceedings on the NPRM

The NPRM was published in the *Federal Register* of June 12, 1984 (49 FR 24252). Hearings were held on July 17, in Denver, Colorado, on July 19, in Chicago, Illinois, on July 23, in New Orleans, Louisiana, and on August 2 and 3, in Washington, D.C. In addition, FRA convened a technical conference on post-accident testing on August 1, in Arlington, Virginia.

The public comment period closed August 15, 1984. Some late-filed comments were received immediately following the closing date, and additional communications relevant to the rulemaking have been received since that time. In no case does it appear that a commenter intentionally withheld comments that should have been submitted by the closing date, and FRA has considered late-filed comments as indicated above.

The NPRM elicited comments from a total of 92 participants, including 28 non-industry sources, 6 national labor organizations, 23 union organizations below the national level, 8 individual employees, two national railroad associations, and 25 railroads. Some of these commenters were represented by more than one witness and/or more than one written submission.

FRA greatly appreciates the time and effort expended by commenters in providing information and stating their positions before the agency. The process of public participation has greatly aided in sharpening the focus of the proceeding, developing a better understanding of the problems faced by workers and managers, and evaluating the regulatory proposals.

General Summary of Comments

Support and Opposition

The rulemaking drew express support from NARUC, NTSB, the New York Department of Transportation, the National Association of Railroad Passengers, the AMA, Louisiana State Police, certain shipper groups, and several other non-industry sources. In addition, a short line system, a regional rail system, a commuter railroad, and a major freight railroad explicitly indicated support for the rulemaking. The ATDA and another major freight

railroad supported the proposals with significant qualifications.

Railroads. AAR said it welcomes a greater federal role, but many of its members were less explicit (except with respect to authority to test). Most of the major railroads did follow the AAR in offering numerous proposed revisions or objections.

Congressional response. This rulemaking elicited an unusual degree of congressional interest, when compared with previous pending FRA rulemakings. The proposed rules were publicly announced by the Secretary of Transportation at a hearing before the Surface Transportation Subcommittee of the Senate Commerce Committee on June 6, 1984, called for the purpose of exploring the impact of alcohol and drug use on railroad safety. On September 20, 1984, the House of Representatives passed by voice vote H.R. 5585, section 2 of which would have directed the Secretary to issue, within 60 days, "a final rule or regulation to ensure the prevention of alcohol and drug use in railroad operations." (H.R. 5585 was not considered in the Senate prior to the *sine die* adjournment of the Ninety-Eighth Congress.) Rep. Henson Moore (La.) filed comments in support of the rulemaking, citing the Livingston, Louisiana, accident as evidence of need. Other specific Congressional reaction is described below.

Labor. The RLEA generally opposed the adoption of Federal regulations for a number of reasons including the following (summarized by FRA):

1. Other major safety issues remain "unaddressed."
2. Lack of accident data base.
3. Failure to establish that Federal rules will have a positive, rather than negative, impact.
4. (Unspecified) adverse affects on voluntary programs.
5. Lack of enforcement mechanisms.
6. Not cost-effective, particularly when compared to EAPs.

However, RLEA representatives indicated that they would not object to certain portions of the rules, as noted below.

The RLEA, BLE and other labor witnesses strongly expressed the view that only voluntary action will prevent alcohol and drug use. The Brotherhood of Railway Clerks (BRAC) said it did not have significant problems with the proposed rules, but did not believe they are the solution to the problem.

The most vociferous opposition came from over a dozen commenters who were local union officers and agreement employees. Some of them accused FRA of acting in bad faith, but others offered

obviously sincere concerns regarding the use to which management of some railroads might put the proposed regulations, particularly the provisions dealing with breath and body fluid testing.

Operation Red Block: Alternative to Regulation?

Labor witnesses argued that the real answer to the alcohol and drug problem is good employee assistance programs, peer identification and referral systems, bypass and "companion" agreements. Bypass agreements are described in some detail in the ANPRM and NPRM. In general, they provide the opportunity for Rule G offenders to "bypass" discipline (generally for a first offense only) and, instead, receive counseling or treatment. Some bypass agreements offer the option of counseling or treatment only where the Rule G offense is reported by a co-worker; others operate on a more universal basis. "Companion agreements" are a new innovation since the beginning of this rulemaking. Companion agreements operate when an employee is detected in a rule violation by a management official. The employee is disciplined (generally dismissed) but is offered a probationary reinstatement on the condition that the employee first complete counseling or treatment. Like bypass agreements, companion agreements are generally limited to first offenses.

Since issuance of the initial notice in this rulemaking, these elements have been combined in a program on the Union Pacific Railroad that has been called "Operation Red Block." Although newly designated, Operation Red Block is the result of years of experimentation and work by the UTU, BLE, the Union Pacific and other railroads.

In recent months, the National Planning Committee has agreed to use the designation Operation Red Block as a title for a national prevention effort designed to enlist employees in prevention of job-related alcohol and drug use while declaring the commitment of the railroads to assisting employees with substance abuse problems. The national Operation Red Block program may take various institutional forms on individual rail properties, but its focus will be a joint effort between labor and management.

For the purpose of discussing comments in this preamble, "Operation Red Block" will be used to denote a highly structured program including formal collective bargaining agreements (bypass and companion), the active participation of rail labor organizations in identifying those employees who

require counseling or rehabilitation, and provisions to reduce co-worker tolerance of job-related alcohol and drug use.

RLEA, UTU and BLE spokesmen have repeatedly and vigorously urged that Operation Red Block is a viable and growing alternative to regulation. By contrast, those railroads that have participated in instituting elements of Operation Red Block appear to view the project as a part of a larger effort to eliminate alcohol and drug use which includes active enforcement of Rule G through existing methods and enhanced means of detection such as those contained in the NPRM.

The labor organizations and Union Pacific offered strong arguments in favor of the Operation Red Block approach. Both UP and the participating labor organizations reported that experience with Operation Red Block on the UP has been positive. It was reported that volitional use of alcohol and drugs declined substantially on those portions of the property where the program had been fully implemented. However, statistical documentation of the effect of the program is difficult to develop and was currently unavailable. In Denver, a UTU spokesman said that there were UTU companion agreements in effect on seven railroads. Although a complete count of railroads and workers participating in all or part of the Operation Red Block concept is not available, FRA is aware that additional agreements are being executed as this rule is prepared.

Some labor commenters suggested that Operation Red Block and Federal regulations could not co-exist. A state-level union officer said that EAP and bypass agreements are working and that "any Federal intervention will disturb the delicate balance that is needed to maintain this position." The commenter thought FRA should observe an 18-month moratorium on regulations, appoint a study commission and undertake other measures in the fields of training and prevention.

Railroad reaction. One regional railroad that has recently instituted a program similar to Operation Red Block joined the labor organizations in cautioning against the issuance of Federal rules. That railroad suggested a one-year delay in implementation of regulations and a "variance procedure" providing exemptions to carriers and labor organizations that are making satisfactory progress toward solving their problems. By contrast, the Union Pacific itself supported the early adoption of Federal rules granting authority for improved detection of Rule

G violations. Like Union Pacific, most other railroads did not view Operation Red Block as an alternative to regulation, although they were generally receptive to the concept on its own merits.

Long-term viability. Perhaps the single greatest issue concerning Operation Red Block is whether, if it spreads to reach most railroad employees, it will constitute a sustained, long-term effort with relatively permanent effects on employee attitudes and demonstrable success in promoting early intervention with those who abuse alcohol and drugs. The commenters were understandably unable to offer much information on that point. Indeed, a local BLE officer who testified regarding the peer intervention component of UP's Operation Red Block said that he got the idea for local committees while reviewing literature in an attempt to respond to the ANPRM in this rulemaking. Another local BLE officer cited his "9 months of experience with a program that works," and a third said he was hopeful after 3 months.

A western railroad that has recently concluded agreements for an employee involvement program testified at the hearings that its previous attempts to encourage peer referral had not proved productive. Operation Red Block is further discussed under "Recent Developments," below.

Miscellaneous Issues

Minimum standards. The AAR, numerous railroad witnesses and the NTSB stressed that the rules should expressly state that they are minimum standards and that the railroads are free to adopt more stringent measures. A major railroad asked, in addition, for a declaration that the rules do not supersede the collective bargaining agreements with respect to disciplinary procedures.

Discipline. In the NPRM, FRA reviewed public comments that addressed the establishment of criminal sanctions, mandatory disqualification periods, and similar concepts. In general, the commenters responding to the NPRM did not take up these themes. However, a shipper group did urge clear standards for corrective actions—"actions that increase severity after the first offense." By contrast, an NTSB member indicated that the Board is not concerned with discipline. Like FRA, NTSB is only concerned that impaired employees be kept out of the railroad operating environment.

Timing. A local union representative and a railroad both suggested a moratorium on rules for a period (12 or 18 months) during which the progress of

labor-management cooperation would be evaluated. They shared the view that Federal rules should be held in abeyance while Operation Red Block is established and evaluated on the individual railroad properties. The same railroad further recommended that carriers and labor organizations who were making progress be able to jointly seek exemptions from the operation of the rules. A major railroad, however, recommended a January 1, 1985, effective date for the proposed rules "in light of the available evidence on the extent of the problem."

Employees covered. The coverage of the final rule and its individual provisions was the subject of considerable discussion. FRA proposed to make the rules applicable to employees covered by the Hours of Service Act (generally operating crews, persons engaged in handling orders and other instructions with respect to train movements, and persons engaged in construction, maintenance and repair of signal systems). Several railroads and RLEA approved the Hours of Service class, but RLEA though FRA should also include supervisory employees, "because they issue orders for employees to perform, even though [the orders] may be unsafe." BLE and a few other commenters argued for coverage of maintenance-of-way and car forces, as well as operating department officers. Indeed, BLE would make the rule universal, a view shared by a commuter railroad and some local officers of operating unions. Some support was expressed for coverage of maintenance-of-way employees or, at least, their working supervisors.

NTSB thought the rules should apply to "all employees who potentially may be involved in an accident," but agreed that precise definition of additional categories of employees presents a difficult issue. NTSB said that its experience with alcohol and drug accidents "has been almost exclusively with people directly involved in operations."

Several labor commenters wanted officers subject to the same testing provisions as agreement employees. The railroads offered no objection to coverage of officers, although they did not want local chairman deciding who would be tested or when. (Other comments on coverage of the rules are discussed with respect to individual provisions, below.)

A local union organization asked that the rules be clarified to provide that covered service is only on-duty time.

Application to railroads. BLE specifically objected to the proposed exclusion of Port Authority Trans-

Hudson from the coverage of the rule. The American Short Line Railroad Association, representing small railroads, stressed that many of its members are very different from trunk line carriers with respect to operating patterns and characteristics, degree of supervision, and known extent of alcohol and drug problems. One of its members asked for a full exemption from the entire rule for any railroad with fewer than 15 persons in covered service, whether freight or passenger.

Cut system and short calls. RLEA, BRS, and other labor commenters urged that any final rules include a right for employees to mark off, either without restriction as to notice of the assignment or in situations where they receive short calls. RLEA proposed that employees have the right to mark off without stated cause twelve (12) times each year (after which the employee would be referred for evaluation by the railroad's EAP). The railroads responded that a cut system would be counterproductive, since it would permit the problem drinker to continue to imbibe while subject to duty. Some employee representatives also urged better notice of assignments through improved line-ups or better scheduling of train movements.

Railroad lifestyles. Labor commenters stressed the difficult working conditions previously described in the NPRM—long and irregular hours, inability to lay off or stop for meals, short calls, increased duties on account of consolidations, boredom at away-from-home terminals, the family stress induced by these conditions, etc. Some of the commenters thought FRA should deal with the aspects of these problems that they saw as greater safety problems than alcohol and drugs, particularly sleep cycles. Others pointed to these conditions as explanations for alcohol and drug use—suggesting that no amount of direct regulation could address the underlying causes. One commenter thought the National Planning Committee should inquire into the effects of rotating shift work on fatigue. Another suggested that these conditions were inconsistent with the responsibility of crews to operate heavy trains and make the "split-second decisions" necessary to anticipate stops and other contingencies.

As was the case in the ANPRM cycle, the extent and variety of comments on the railroad lifestyle in response to the NPRM were impressive. Several local union representatives called for revision of the Hours of Service Act, and one representative suggested revision of basis-of-pay provisions in the collective bargaining agreements. Employee

representatives continued to stress the importance of recreational facilities at away-from-home terminals. Several labor commenters said that unreasonable work schedules are related to the insufficient number of employees available for assignments. It was suggested that dispatchers are often too overworked to provide line-ups and other information useful to employees attempting to estimate when they will be called.

Several commenters provided rather specific information on the long and irregular hours they or their co-workers were required to work. A UTU local chairman claimed that his railroad had restricted layoffs, in violation of the agreement, during a wheat harvest. Another UTU local chairman provided abstracts of time records for numerous employees in Wyoming, showing very erratic hours, occasional short rest periods and apparent attempts by the carrier to assure availability of employees by requiring them to mark off at precisely 11 hours and 59 minutes (thereby providing for 8, rather than 10, hours off). Other commenters cited instances of long or irregular hours out of their personal experiences.

Other rules. Participants had various suggestions for additional rules. Some of these suggestions were offered as substitutes for the proposed rules and some as additional measures that might be undertaken to ensure fitness. The Washington Legal Foundation urged the adoption of requirements for supervisory observations. Some labor commenters appeared to support licensing of locomotive engineers or others in safety-sensitive functions. The BLE suggested that FRA consider licensing of engineers to promote improved training in a new rulemaking following completion of this rulemaking. A commuter railroad also appeared to support licensing of engineers. Some commenters suggested the use of train control systems and alerting devices as an alternative or supplement to alcohol or drug rules.

Other comments. A consultant with expertise in substance abuse generally approved of the NPRM but questioned whether FRA might be underemphasizing prevention by failing to include standards for EAPs. The consultant said that some military units have experienced declines in self-referrals as the armed forces have pressed their drug detection programs and urged the creation of a centralized data system bringing together post-accident testing, pre-employment drug screens, EAP referrals, detection efforts and the like.

A short line railroad objected to the complexity of the proposed rules. The commenter would stress employee responsibility and provide Federal sanctions against employees who fail to report alcohol and drug violations.

A former railroad employee, now a consultant, cited an alleged lack of literacy among railroad managers and alleged discriminatory practices by the railroads as barriers to enlightened and fair application of the proposed rules. He urged that a neutral third party be designated to apply any regulations that might be issued.

Finally, FRA received strong encouragement from a variety of persons and organizations, particularly within organized labor, to make active efforts to acquaint employees and managers with the requirements of any final rules before they are implemented.

Testing of Breath and Body Fluids

Some of the comments on breath and body fluid testing cut across the individual proposals. Local union representatives cited the alleged technical deficiencies of breath testing devices, such as non-specificity and susceptibility to manipulation by the operator.

The BLE said that FRA must guarantee the "neutrality, integrity and validity" of tests, ensure "fair handling" of samples and secure "preservation without tampering." Several employees and employee representatives urged that any breath tests should be administered by persons not connected with the railroad. It appeared that some of these commenters would be satisfied by use of a testing system that, by its design, eliminates the possibility that the operator could control the outcome. Some employee representatives were opposed to all testing for disciplinary purposes, but others did not object or limited their objections to situations in which testing might be motivated by "malice."

Two companies offered systems to circumvent the cost and complexity of electronic or chemical testing devices. One advocated use of its saliva testing system. Another advocated use of its breath system, which consists of individual, disposable tubes containing reagents that change color at predetermined BAC levels.

Several commenters discussed the technical aspects of urine drug screens. A well-known commercial laboratory said that all positive drug screens should be confirmed by another method, preferably gas chromatography/mass spectrometry (GC/MS), and that chain of custody documentation should be a vital part of any program that involves

discipline. The same commenter suggested retention of samples in frozen form for at least 60 days, together with all analytical data. Finally, the commenter said FRA should prepare a listing of forensic-quality laboratories for the railroad's use.

Another established commercial laboratory also stressed confirmation of urine test results for drugs by a more specific and sensitive technique. The commenter said that FRA should establish criteria for testing labs, including the requirement that the laboratory be dedicated to analysis of urine for drugs of abuse and that it be staffed by competent and certified personnel with expertise in handling samples for forensic use. The commenter advised that membership in a quality control program is an important indicator of competence, but that FRA should not seek to specify the particular assays or procedures employed by a laboratory.

A consultant, who is former head of the Drug Enforcement Administration, and a toxicologist from a commercial laboratory also indicated the importance of GC/MS confirmation. On the other hand, one railroad would make confirmation mandatory only if a sufficient portion of the sample remained, even where discipline is involved.

In comments submitted in response to the ANPRM, a university-based forensic toxicologist urged that FRA designate a laboratory to process all samples, headed by a "board-certified" forensic toxicologist. That commenter urged confirmation of all positives by gas chromatography, high pressure liquid chromatography, and finally by GC/MS.

The NTSB urged FRA to ensure standardized testing for drugs. NTSB thought that test procedures should be sensitive and specific enough to detect and quantify both illicit drugs and therapeutic levels of licit drugs.

The chief toxicologist of Chapel Hill, N.C., Dr. McBay, submitted a statement that said, in part, that few laboratories are set up to do "forensic" quality work and that few professional forensic toxicologists are available to interpret laboratory results.

The RLEA cited Dr. McBay and Dr. Richard Hawks of NIDA for the proposition that urine drug screens should not be used as the basis for discipline. Another commenter also quoted McBay to the effect tests should not be used as the sole basis for employment decisions or discipline and for the proposition that urine tests are useless to determine dosage used or impairment. In order to avoid confusion,

FRA has entered in the docket the letter from Dr. McBay, Dr. Dubowski, and Dr. Finkle to the *Journal of the American Medical Association (JAMA)*, which is evidently the basis of the statements attributed to Dr. McBay by other commenters. *JAMA* 249:881 (Feb. 18, 1983). Dr. Hawks indicates that he does not recall the remark attributed to him. (He has written on the general subject. See, e.g., Hawks, R.L. "Developments in Cannabinoid Analyses of Body Fluids, etc.," in *The Cannabinoids: Chemical, Pharmacologic, and Therapeutic Aspects* (Academy Press 1984)).

The comments highlighted a central dilemma of any attempt to control the use of drugs other than alcohol in an environment where safety is a prime consideration, i.e., obtaining blood requires a somewhat invasive sampling technique while urine often does not provide firm indications with respect to recency of use or impairment. A commercial firm offered its saliva testing system as an alternative that it said could establish whether a subject has used marijuana within the preceding 4 hours. However, the reliability of saliva as an indicator of recent use was implicitly questioned by Dr. McBay in his filing.

Several commenters noted that body fluid test results for drugs other than alcohol are not readily translatable into degrees of impairment (in contrast to the relatively direct relationship between blood alcohol levels and impairment). They argued that generally recognized benchmarks do not exist that would permit generalizations regarding degree of impairment. Dr. McBay urged increased testing as a means of providing a better foundation for determining the behavioral effects of drugs at various levels.

One railroad urged that, if breath or body fluid testing is made mandatory, FRA inspectors should administer the tests. This commenter suggested that the inspectors should be persons with social service expertise whom employees would be more likely to approach with their problems.

Finally, a local union organization asked who will pay for testing.

General Accounting Office Report

During the period FRA was conducting public proceedings on the ANPRM and developing the NPRM, the General Accounting Office (GAO) was conducting a review of FRA activities related to alcohol and drug use and safety. GAO provided the Secretary of Transportation with a letter report on that review dated July 30, 1984 (B-215500), which FRA has included in the docket of this rulemaking and has

considered in preparing this final rule. GAO stressed the limitations of the current observation techniques used to detect alcohol and drug impairment and suggested that testing should be required for at least some of the following circumstances:

- (1) after all FRA reportable accidents, excluding grade-crossing accidents, (2) after all fatalities of on-duty railroad employees and rail passengers, (3) when employees are suspected of alcohol and drug use, including after reportable injuries, and (4) during scheduled physical examinations.
- GAO at 8.

In support of its recommendations for mandatory testing, GAO cited the resistance of employees to requests that employees submit to testing on a voluntary basis. GAO said that its review of selected cases on six railroads showed that railroad officials requested testing in at least 84 of 197 cases where employees were suspected of violating the railroad's alcohol and drug rules. Of the 84 cases where employees were asked to cooperate in testing, workers refused tests in 47 cases and refused to authorize release of the results to the railroad in 2 other cases.

After analysis of additional information gathered in its review, GAO concluded by noting its general agreement with the proposals contained in the NPRM. However, GAO expressed concern that the \$150,000 threshold for property damage in the post-accident testing proposal was too high. GAO believed that inclusion of a larger group of accidents would tend to increase the deterrent effect of the provision and assist in the early identification of employees who might otherwise be involved in very serious accidents if not disciplined or assisted after lesser occurrences.

Recent Developments in the Industry

In the seven months since the close of the comment period, there have been a number of developments in the railroad industry that are relevant to the rulemaking. FRA has taken note of these events, reviewed various written submissions to the docket regarding the events, and has considered whether these developments would warrant a reopening of the rulemaking. FRA has determined that the current rulemaking process, which has not been underway for over two years, should be brought to a conclusion.

There has been no time in the past three years, at least, when there were not external developments of one kind or another that might ultimately affect the shape of Federal regulations; and it appears likely that the period of

experimentation and ferment will continue, to an extent, for the foreseeable future. FRA views these developments as generally positive—in effect, a process of evolution. Indeed, some of these developments appear to anticipate or even rely upon the hypothesis that FRA will put in place clear standards related to the control of alcohol and drug abuse. There is no reason to suspect that recent developments will produce definitive results indicating a course contrary to that which appeared prudent based on review of the public comments submitted by the comment closing date, particularly in the absence of a known Federal policy around which other efforts can be constructed.

Nevertheless, these developments are summarized in three units below in order to provide the full background against which the decisions in the rulemaking are reached.

Urine testing programs. Two major western railroads have recently implemented programs under which employees are required to provide urine samples in situations similar to those proposed under the "just cause" authority of the proposed rule (sec. 218.109). So far as FRA is aware, neither program has been subject to legal challenge by the employee organizations.

FRA has received very little detailed information on the program instituted by one of the railroads. The other railroad and the UTU have provided some details concerning the program in effect on that property. Since August of 1984, this railroad has required employees involved in train accidents caused by human factors to provide urine samples after consultation between the local supervisor and a higher level manager. The employee is required to provide a sample at a clinic or hospital under contract to the railroad for this purpose. If the employee initially refuses to participate, the supervisor reads the employee a warning statement. If the employee continues in the refusal, the employee is removed from service and subject to discipline for insubordination.

In a telephonic report initiated by the railroad, it was stated that 580 employees had been tested, most of them operating employees. Seventy-nine (79) samples were said to be positive for alcohol or drugs (most of those positive for drugs). There have been 18 refusals, and the results were still pending for a small number of samples. In addition to tests of agreement employees, 338 officers were tested, of whom six (6) were positive. These statistics followed the trends indicated in a previous letter

to FRA from the railroad's chairman. The railroad indicates that it dismisses employees who test positive for illicit drugs (and presumably alcohol) in the urine, but immediately refers them to its EAP program and assists them in obtaining counseling or treatment. The dismissed employees are reinstated in a probationary status when they have discontinued use of drugs and are required to provide urine samples on demand for one year thereafter. According to the railroad, about half of the former drug users restored to service later test positive in a subsequent test (and are permanently dismissed). The railroad also says that voluntary referrals to its EAP have increased significantly (although it is not clear whether the increased referrals have resulted from the testing program or increased prevention efforts). The railroad has also implemented Operation Red Block with respect to a portion of its work force. The railroad said it has added two additional counselors, in part to handle the increased case load.

The railroad contends that its program has reduced human factor train accidents by about 70 percent since the inception of the program. The international officers of the UTU accuse the railroad of randomly testing "anything that walks or talks on the premises on the premise that there is a probable cause for such illegal actions . . . or for any other reason they can conjure up to fit the circumstances." FRA views both of these claims as factually unsupported at this time, since FRA has not had the opportunity to investigate the specific procedures followed by the railroad or the manner in which data is collected and analyzed.

This experience does tend further to confirm a fact already known (and discussed immediately below)—that a significant number of employees use illicit drugs either on or off the job. The experience also indicates the importance of setting down clear Federal guidelines in a timely manner, since most railroads are likely to rely upon a Federal authority to conduct tests, at least in the absence of an explicit agreement provision.

Periodic physical policy. Another major railroad has recently adopted a policy under which drug urine screens are conducted as a part of routine physical examinations. This initiative is consistent with a preliminary recommendation contained in the NPRM. Employees whose urine tests positive are not subject to discipline, but are withheld from service until they are able to provide a "clean" urine sample.

An employee is apparently provided two opportunities to pass a follow-up test before adverse action is taken. The railroad encourages employees to avail themselves of the services of the EAP program to deal with drug abuse problems involving psychological or physical dependencies. FRA has no information at this time regarding the results of this program.

Operation Red Block conferences. In early 1985 FRA joined with railroad management and labor to formally launch the national Operation Red Block voluntary alcohol and drug prevention program by sponsoring five regional meetings in New York (January 28), Kansas City (January 30), Las Vegas (February 1), Cleveland (March 12) and Atlanta (March 14). In total, almost 1,000 people representing all the major railroads, many smaller railroads and the rail unions attended the five meetings. The attendees learned that an action-oriented prevention program can provide options for employees to deal with co-workers who may use alcohol and drugs on the job.

At the conferences, BLE and UTU representatives introduced the elements of Operation Red Block as implemented on several railroads. They stressed that a professionally staffed EAP, volunteer prevention committees to help "spread the word," and the commitment of both top management and union officials are necessary for a successful prevention program, as well as formal labor-management agreements. In recent months several major rail systems, representing all regions of the country, have decided to implement Operation Red Block or prevention programs containing similar elements.

FRA believes that this emphasis on prevention, along with the commitment to provide rehabilitation and treatment for first-time rule violators, should reduce over time the likelihood of employees tolerating or covering up for co-workers who use alcohol or drugs on the job. Recent developments with respect to the spread of Operation Red Block have tended to confirm FRA's view that Federal regulations should be consistent with this kind of private sector initiative.

In sum, recent developments follow trend lines set before the close of the comment period in this proceeding. Labor and management are increasingly concerned over the alcohol and drug problem and have chosen to emphasize different tactics as principal alcohol and drug countermeasures. However, there is also an inevitable convergence of competing positions. For instance, managements are using detection

techniques in ways that emphasize changing unacceptable behaviors rather than merely penalizing them. Employees are increasingly declaring their stake in the observance of Rule G and recognizing the legitimacy of public concern for safety. What remains is for Government to put in place permanent structures that can facilitate, channel, and encourage the positive developments set in motion over the past two or three years.

Extent of Alcohol and Drug Use Problem

Public comments on the extent of the alcohol and drug problem have confirmed FRA's conviction that, while most employees are sober and fit for duty all of the time, a significant minority of railroad employees use alcohol and drugs in connection with railroad operations. It is clear that alcohol and drug use is sufficiently common to pose a significant safety problem. The largest number of commenters appeared to be convinced that the alcohol/drug problem is sufficiently deep and widespread to require some kind of new initiative. Some defended the railroads as merely on a par with other industries, but there was disagreement among those commenters as to whether public safety considerations indicated special efforts in the railroad context.

As was true during the comment period on the ANRPM, most of the industry participants commenting on the NPRM, on both the labor and management sides, have confirmed that alcohol and drug use does occur on the railroads with unacceptable frequency, despite existing rules and programs. These comments and information from all reliable sources, including FRA safety investigations, continue to indicate that the problem includes "pockets" of drinking and drug use involving multiple crew members (before and during work), cases of individual employees reporting to work impaired, and repeated drinking and drug use by individual employees who are chemically or psychologically dependent on those substances. (These categories are, of course, not mutually exclusive. A dependent drinker or drug user may actually institute an episode of "party drinking," or a person with no history of substance abuse problems may drink or use drugs secretly because of a desire to escape a life crisis.)

General comments on the extent of the problem. The President of the ATDA agreed with FRA's characterization of the extent of the alcohol and drug problem on the railroads. Several local

union representatives and employees offered comments tending to suggest that the problem has been overdrawn, at least in the media. One commenter, an employee of a southern carrier, estimated that 5 percent of railroad employees have alcohol or drug problems. Some from labor ranks agreed to the existence of a significant problem but thought it is not growing, only becoming more visible. Some thought that the railroads' problem is similar to that in other industries, but another labor commenter said that the railroads "cannot match" other industries with respect to the severity of the problem.

Reflecting the tensions inherent in many of the labor comments, one commenter said he disliked working with alcohol or drug-impaired employees, but liked the prospect of putting new disciplinary tools in the hands of management even less. A working locomotive engineer said the alcohol problem on his railroad had improved in the past 12 years, but a local BLE officer said he was personally aware of the need for a response to the substance abuse problem on his railroad.

Alcohol prevalence. The REAP Report findings remain helpful and illustrative of the kind of drinking that takes place in the railroad industry. The authors made the following estimates for six study railroads that employed one-half of the railroad work force:

- 23 percent of railroad operating personnel were "problem drinkers" (actually between 14 and 24 percent, depending on the definition used).
- 5 percent of workers reported to work "very drunk" or got "very drunk" on duty at least once in the study year (1978).
- 13 percent of workers reported to work at least "a little drunk" one or more times during that period.
- 13 percent of operating employees drank while on duty at least once during the study year.

All survey data are difficult to interpret, and there may have been changes in these drinking patterns since the study year. For instance, not all "problem drinkers" under the survey definitions brought their problems to work during the study year. The survey does not appear to be particularly helpful in quantifying the number of diagnosed alcoholics in the industry or the number of such persons in remission during a representative period of time. Nevertheless, these data continue to be acknowledged as credible indicators of a substantial problem by most carriers, the rail labor organizations, and many of their spokesmen.

Specific comments on alcohol use reinforce the impression that alcohol use is reasonably prevalent, while emphasizing that simple conclusions are not easily drawn. A national union officer used a 12 percent estimate (presumably referring to REAP findings concerning job-related use in a single year), but still concluded that "this industry is a safe place to work, in part due to employees' contributions." Another union officer thought a job-related alcohol use rate of 12 percent might be accurate for some locations on his railroad, but not for others.

Other drug prevalence. FRA is increasingly persuaded that use of other drugs, and performance decrements stemming from their use off the job, are becoming a substantial problem in the railroad industry. As FRA noted in the NPRM:

Drug abuse is . . . a problem of national scope that touches all segments of our society, including the professions. It is not surprising that marijuana use is in increasing evidence on the railroads, since 27 percent of young adults reported current use of that substance in a National Institute on Drug Abuse survey (National Survey on Drug Abuse: Main Findings at 31 (1982)). There is also evidence that use of cocaine, estimated at 6.8% of young adults in the 1982 survey, may be growing among middle income persons such as railroad employees as a consequence of increases in supply. Drug users constitute a growing segment of the populations served by the employee assistance programs, and indications are increasing that drug use is emerging as a significant safety problem in railroad operations.

NPRM p. 12; 49 FR 24254. Comments received in response to the NPRM tended to confirm, rather than challenge this analysis.

The AAR indicated that railroads in the Northeast are seeing approximately 30 percent of their pre-employment drug screens prove positive for marijuana. Amtrak reported that 24 percent of its pre-employment drug screens had proved positive since inception of its program in September of 1983, and a freight railroad reported 30-35 percent positives in its hiring effort in a major midwestern city. It should be recalled that pre-employment drug screens were not conducted prior to the inception of this rulemaking process, except by one railroad that did not include marijuana in the list of substances tested. Therefore, it is reasonable to assume that a substantial proportion of recent hires in the railroad industry brought habits of substance abuse to their current period of employment.

The experience of the western railroad (reported under "Recent Developments" above) also tends to

support the existence of significant drug abuse among railroad employees.

The fact that drug abuse is reasonably prevalent among a substantial minority of railroad employees does not, of course, mean that they all necessarily bring their problem to work. However, it is inevitable that some do. Additional anecdotal evidence is available to confirm this conclusion. A western railroad cited the example of an employee who lost his hand while apparently under the influence of cocaine. Employees of the same railroad testified that there are a significant number of regular users of illicit drugs at their work location who bring their problems to work, and a union representative from a southern railroad cited the "increasing problem with drug abuse among our young people." In one train accident determined by the NTSB to have resulted, in part, from drug use (Newcastle, Wyoming), at least one member from each of three separate crews implicated in the accident tested positive for marijuana at levels suggesting either very recent use or regular use. Drug abuse surfaced in additional accidents discussed below.

History teaches that easily documented substance abuse problems tend to represent only a small portion of the actual problems. Further, the pathology of drug abuse makes it inevitable that prevalence of off-the-job use will translate into a smaller, but by no means insignificant, problem in the workplace.

Safety Consequences of Alcohol and Drug Use

In the NPRM, FRA stated its preliminary conclusion that "alcohol and drug use result in safety risks and consequences that are unacceptable." (NPRM at 13; 49 FR 24254.) This conclusion was based on a record of accident investigations and reports extending over more than a decade. FRA also noted that the documented consequences of alcohol and drug use may well be exceeded by those that have been recorded. (The reasons for this are discussed in detail, below, under "Post-Accident Testing.")

FRA believes that the documented accident picture, together with accumulated judgments of commenters in this rulemaking, clearly indicate a need for additional initiatives to control alcohol and drug use. The need for action is underscored by the fact that the documented data undoubtedly understate the extent of the actual problem. Many additional train accidents, fatalities in train incidents, and injuries in train incidents are

caused by alcohol or drug impairment, but the role of alcohol or drugs escapes detection or is inadequately documented or reported.

Finally, the historic accident pattern could be altered substantially if an alcohol or drug-impaired employee were to cause a catastrophic accident involving release of hazardous materials in a populated area or multiple fatalities to passengers. Limiting the risk of such an event to the lowest possible level must be a major objective of the railroad safety program.

Updated Accident Data

Since issuance of the NPRM, FRA has continued to review the railroad accident/incident record. At the time of the NPRM, FRA had identified 34 fatalities, 66 injuries and over \$28 million in property damage (in 1983 dollars) that were judged to have resulted from the errors of alcohol and drug-impaired employees in 45 train accidents and train incidents during the period 1975 through 1983. One of those accidents resulted in the release of hazardous materials and the evacuation of an entire community of 2,700 persons, some of whom were unable to return to their homes for an extended period.

In order to ensure that this data is the best and most reliable available, FRA has continued to review the 1975-1983 data. Although the commenters did not specifically challenge FRA's findings with respect to the accidents relied upon, FRA has, on its own motion, determined that one accident should be deleted from the previous count because of the insufficiency of data to confirm the inference of significant impairment (accident at Farm, West Virginia, September 8, 1980). FRA had previously excluded other accidents from this tabulation because alcohol could not be directly linked to the cause or consequences of the event and, in one case, because alleged drug use could not be established because samples were not adequate for a full toxicological analysis.

The 1984 toll of alcohol and drug-related accidents may have represented a new record, at least in the train accident category, but inadequate post-accident testing procedures and other factual gaps arising from the nature of the investigations have made resolution of the 1984 experience very difficult.

Train accident summaries. In cooperation with NTSB, FRA conducted investigations of several accidents during 1984 that appear at this date to involve alcohol or drugs as a contributing factor or that involve sufficient evidence strongly to suggest the possibility of such involvement. FRA

emphasizes that some of these accidents are still subject to review by NTSB, and in those cases NTSB will make formal findings of probable cause. FRA's purpose here is to ascertain, by order of magnitude, the recent impacts of alcohol and drugs on railroad safety—not to anticipate any finding of probable cause with respect to a particular accident. In compiling this preliminary listing, FRA has excluded those accidents that involve positive tests for alcohol or drugs, or similar indications of alcohol/drug use, where these results appear not to bear on the cause or severity of the accident. The recent accidents are summarized on Table 2, below. (Table 2 is an updated and corrected version of Table 2 in the NPRM.)

FRA has included on Table 2 only those train accidents investigated by FRA with respect to which FRA deems it probable that alcohol or drugs played a necessary contributing role in the cause or severity of the accident. All of the accidents on Table 2 are relied upon in the economic analysis accompanying this final rule.

Table 2a is a new compilation of 1984 train accidents investigated by FRA with respect to which there is a significant possibility that either alcohol or drugs may have played a role. The accidents illustrate the difficulty of documenting the alcohol and drug problem. In two accidents, for instance (Carbondale, Ill., and Alvarado, Texas), recent alcohol or drug use is reasonably well documented for one crew member. However, interpretation of the data at the levels detected is difficult; and in each case the crew member who appears to have been in violation of Rule G (or with respect to whom the most complete evidence is available) may not have been operating the train. In such cases, alcohol may be viewed as a distinctly secondary or "possible" contributing cause.

In a third case (Camden, Arkansas), evidence suggests the possibility of alcohol use by one crew member and marijuana use by a second crew member. However, adequate samples were not available for either individual; and other evidence was not dispositive.

In a fourth case (Newcastle, Wyo.) a very thorough NTSB investigation concluded that marijuana use by the engineer of the striking train (in a rear-end collision) was a contributing cause in the accident. Although it is clear that the engineer had made fairly recent use of marijuana, FRA is not persuaded that the current evidence is adequate to conclude that the engineer used the substance with sufficient recency to have experienced acute effects at the time of the accident. However, NTSB

had additional information before it that tends to support its determination; and FRA's election not to include this accident on Table 2 merely indicates a judgment at the margin of a very difficult case.

FRA calls attention to the accidents on Table 2a because they indicate the possible involvement of alcohol and drugs in some of the more serious events of the past year and the difficulty faced by the investigating agencies, particularly in the absence of clear procedures to ensure that toxicological samples will be promptly obtained. FRA does not rely upon these events in its economic analysis.

Train accidents reported to FRA. During 1984, the railroads utilized cause code 510 (impairment of efficiency due to alcohol or drug impairment) with respect to 2 accidents, 1 of which had not been investigated by FRA. The latter (at Detroit, Mich.) is reflected on an updated Table 3. (The Camden, Ark., and Alvarado, Texas, accidents were also reported using code 510, but in each case the report was filed by a railroad other than the railroad employing the crew members at fault, while reports filed by the employing railroads did not make mention of alcohol/drug involvement.) Tables 2 and 3 have been further modified by moving the "Proviso, Illinois" accident formerly shown on Table 3 to Table 2 (where it is listed as "Melrose Park, Illinois"). This change is made because FRA did, in fact, make a contemporaneous investigation of that occurrence.

Employee fatalities in train incidents. During 1984, FRA identified three (3) employee fatalities in train incidents that are listed, with previous relevant incidents, on an updated Table 4. Two of these involved maintenance-of-way personnel, and a third was a brakeman.

Readers are reminded that Table 4 was designed to display the full range of alcohol and drug-related fatalities in train incidents. Its scope was broader than the scope of Table 2. In preparing the proposals contained in the NPRM, FRA relied upon 20 of the accidents displayed on Table 4 that involved covered employees with appreciable blood alcohol readings (19) or an impairing drug found in the body (1).

The 1984 data do not change the total of 20 fatalities among covered employees (in train incidents) involving alcohol or drugs as a necessary element in the cause of the event. The only fatality involving a covered employee for which available toxicology or other evidence established alcohol or drug impairment was at Enola, Pennsylvania. In that case the yard brakeman was

struck by a car body that (in quick summary) had been lifted out of the centerplate by a heavy coupling. Although it may be that the brakeman could have avoided the hazard had he been sober, FRA's investigation could not establish that such would have been the case. Unlike many other train incidents involving alcohol, the brakeman evidently did not contribute to the creation of the hazard itself. Therefore, FRA does not rely upon this event as a part of the accompanying economic analysis. The events involving the two maintenance-of-way employees are, of course, of interest with respect to the possible need for future rulemaking activity.

Summary table. A ten-year summary covering the period 1975 through 1984 is set forth as an updated Table 1. The summary reflects only those events believed relevant to the rulemaking for which FRA was able to conclude that alcohol or drug use by a covered employee played a necessary part in the cause of the accident or materially affected the severity of the accident. Accidents displayed on Table 2a are not included; nor are certain aforementioned employee fatalities. Thus, the Table is believed to state the statistical case with respect to documented alcohol and drug involvement in a conservation way.

Table 1 shows that alcohol or drug impairment was responsible for 28 train accidents and 20 fatal train incidents. These 48 accidents and incidents together accounted for 37 fatalities, 80 nonfatal injuries, \$20.4 million in

railroad property damage, and \$13.8 million in additional damages related to environmental clean-up at Livingston, Louisiana (damages and clean-up costs stated in 1984 dollars). These totals do not include damage to lading, damage to other non-railroad property, public response costs, or monetary consequences flowing from fatalities and injuries.

Undocumented accidents and casualties. Referring to pre-1984 data, the NPRM concluded:

[T]he documented data tell only a part of the story. Many alcohol and drug-related accidents and injuries are not so recorded under the existing reporting system. From available information, it appears highly probable that because of the latitude present in that system the railroads either fail to detect or fail to report alcohol and drug involvement in a significant number of cases. For instance, of 15 significant train accidents identified by NTSB or FRA investigations as involving alcohol or drugs, the respective railroads reported alcohol or drug involvement in only 6. The under-reporting of alcohol and drug involvement is likely even more pronounced in the vast majority of accidents which do not occasion a Federal investigation.

(NPRM p. 14; 49 FR 24254.) (Considering the Melrose (Proviso), Ill., accident as significant and deleting the Farm, W. Va., accident from the count results in a ratio of 15 accidents determined to have alcohol or drug involvement to 7 accidents reported by the railroads using code 510 in the period 1975-1983.)

Despite the harsh light of public attention focused on the alcohol and drug problem in 1984, the railroads used

cause code 510 (impairment of efficiency and judgment due to alcohol or drugs) for only 1 of the three (3) 1984 accidents with respect to which FRA investigations found alcohol or drug involvement in the cause. One additional fatality-producing train accident for which the railroad employed code 510 was investigated by FRA as an employee fatality and is included on Table 4 as a matter of administrative convenience (Proctor, Minn.). Thus, with this accident included, the total for the years 1975 through 1984 is 19 train accidents investigated by FRA and determined to have alcohol or drug involvement in the cause (or severity) only 9 of which were reported using code 510 (the alcohol/drug impairment code) for either primary or contributing cause.

FRA remains convinced that improved reporting systems and consistent toxicological testing of employees after major accidents would disclose numerous additional cases of alcohol and drug impairment among employees involved in human failures.

The NPRM explained that alcohol and drug-related employee fatalities in train incidents are at least twice as numerous as reflected in current statistics. It further noted that many non-fatal injuries in train incidents are likely caused by alcohol and drugs each year—a dimension of the problem for which no reported data are available. (NPRM at 15, 22-24; 49 FR 24254, 24265-24266.)

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TABLE 1
SUMMARY OF RAILROAD ACCIDENTS/INCIDENTS
(1975-1984) WITH ALCOHOL OR DRUGS DIRECTLY AFFECTING CAUSE

		<u>Fatalities</u>	<u>Injuries</u>	<u>Damage (million \$)</u>
Train accidents investi- gated by FRA	18	17	76	16.0 (R.R.)
Other train accidents rept'd by the railroads	10	0	4	.3 (R.R.)
Total train accidents	28			
Employee casualties/train incidents* (ops only)	20	20	N/A	
<u>Total accidents/ incidents</u>	48			
<u>Total fatalities</u>		37		
<u>Total injuries</u>			80	
R.R. damage total				16.3
R.R. damage total (1984 dollars)				20.4
<u>Total damages</u> (1984 dollars)				34.2**

*A train incident is an event involving the movement of railroad on-track equipment that results in a death, a reportable injury, or a reportable illness, but in which railroad property damage does not exceed the reporting threshold for train accidents. This listing does not include fatalities to non-operating employees.

**Includes additional Livingston, LA., damages of \$13.8 million in 1984 dollars (principally environmental cleanup) but not damage to lading or third party property in the other accidents.

NOTES: (1) In this listing, one reported train accident that involved minor property damage has been listed with train incidents because it was investigated by FRA as an employee fatality.

(2) This listing does not include alcohol and drug-related fatalities in non-train incidents -- i.e., in settings other than railroad operations.

Table 2
Listing of Railroad Train Accidents Involving Alcohol and/or
Drug Use as Causal Factors*
(Investigated by) FRA
(January 1975 through December 1984)

Accident Location	Date	Positive Lab Result/Carrier Drugs - Alcohol	Fatalities	Injuries	Railroad Property Damage-Equipment and Maintenance of Way Estimate of Costs	Accident Descriptive
Black Rock, N.Y.	06-15-75	.16 ENGR. CN/PCT	-	35	70,281	Rear End Collision (Passenger Trains)-Intoxicated engineer of following train failed to control train in accordance with signal indication.
Oglesby, GA.	07-28-77	.23 ENGR. SCL	1	1	458,350	Derailed caused by excessive speed on a restrictive curve (1 locomotive and 13 cars). Engineer operating under the influence of alcohol.
Wooster, Ohio	11-18-78	.14 ENGR. Conrail	-	3	167,504	Side Collision - While under the influence of alcohol, engineer and front brakeman ignored stop signal.
Carnero, NM	12-31-78	.27 ENGR. ATSF	2	1	29,500	Side Collision - While under the influence of alcohol, engineer failed to control movement of train. Front brakeman failed to take appropriate action.
Aurora, NE	5-17-79	.1 ENGR. BN	-	2	56,400	Rear End Collision-Engineer failed to control movement. Head brakeman failed to take appropriate action.
Thousands Palms, CA	7-24-79	.18 ENGR. SP	1	4	1,441,700	Rear End Collision-Engineer failed to observe stop signal indication while under alcohol influence. Front brakeman failed to take appropriate action.
Alliance, Ohio	9-12-79	.17 ENGR. Conrail	-	3	2,416,000	Derailed caused by excessive speed through crossover. Engineer fell asleep. Others in cab failed to take appropriate action.
Royersford, PA	10-01-79	N/A. Conrail	2	-	467,500	Rear End Collision-Conductor operating locomotive under the influence of marijuana failed to control train movement in accordance with signal indication.
Pisgah, CA	5-11-80	.16 ENGR. ATSF .16 BRA. ATSF	1	3	1,694,750	Rear End Collision-Engineer failed to operate train in accordance with signal indication and at excessive speed. Brakeman failed to take appropriate action.
Bostic Yard, NC	4-01-81	.166 ENGR. Clinchfield	-	-	244,016	Head-on Collision-Engineer failed to operate train in accordance with signal indication while under the influence of alcohol.

* Necessary element in the direct cause or severity of the accident.

1 Developed through the formal hearing and investigative process. Record also revealed that employee received treatment at a prior time for alcoholism.

Table 2—Continued
 Listing of Railroad Train Accidents Involving Alcohol and/or
 Drug Use as Causal Factors*
 (Investigated by) FRA
 (January 1975 through December 1984)

Accident Location	Date	Positive Lab Result/Carrier Drugs - Alcohol	Fatalities	Injuries	Railroad Property Damage-Equipment and Maintenance of Way Estimate of Costs	Accident Descriptive	
Duncannon, PA	2-10-82	² ENGR, Conrail	-	4	222,600	Head-on Collision-Engineer failed to operate train in accordance with signal indication. Brakeman failed to take appropriate action.	
Newport, AK	10-03-82	.08 ENGR, MP	2	2	919,000	Side Collision (at end of double track)-Engineer under the influence of alcohol.	
Livingston, LA	9-28-82	See Descriptive	ICG	-	6	1,669,525	Derailment (considerable hazardous commodities) Engineer and front brakeman dismissed for alcohol consumption.
Melrose Park, IL ³	7-13-83	.298 ENGR, CNW	0	1	37,000	Derailment, Engineer passed stop signal and ran over derail.	
Sullivan, IN	9-14 83	.29 ENGR .04 BRA LN	2	2	823,828	Rear End Collision-Engineer failed to control train. Front brakeman failed to take appropriate action.	
Greystone, NY	3-16-84	ENGR, Metro-North	-	4	65,000	Rear End Collision. Engineer of following train failed to control train in accordance with signal indication. Engineer tested positive for barbituates.	
Wiggins, CO	4-13-84	Fireman, BN .091	5	2	3,891,428	Head-on Collision. Several witness statements indicate engineer was intoxicated. Test on engineers body was positive for alcohol, but a level could not be determined because of the condition of the body.	
Silver Bow, Mt.	11-24-84	ENGR, UP .069	1	3	1,320,239	Derailment at 68 mph on 25 mph curve.	
					17	76	\$15,984,621 \$19,957,598 - Expressed in 1984 Dollars

Special Notes

⁰In accident situations where death did not occur, the metabolism of alcohol in the body continues. Hence, delayed BAC testing reflects a lower BAC than that which actually existed at the time of the accident. Therefore, in the above listed accidents, the BAC is understated due to the length of elapsed time occurring following the accident until the testing process takes place.

¹Another accident occurred on the Burlington Northern Railroad at Angora, Nebraska, on June 6, 1980, which resulted in two fatalities, three injuries, and having railroad property damage estimated at \$1,530,000. The engineer of locomotives assigned to a stalled train had coupled to a consist of helper service locomotives five miles forward from the location of the stalled train. Excessive speed and other poor judgement factors resulted in the collision of the combined locomotive consist with the stalled train. The BAC of the engineer controlling the movement was negative. The BAC of the non-controlling Engineer was .074. The responsibility of the controlling Engineer was clearly direct. The responsibility of the non-controlling engineer was subordinate. Therefore, this accident was deleted from the above listing, but is herein highlighted to provide clarification.

²Known evacuation of areas residents only in the Livingston, Louisiana, accident.

* Necessary element in the direct cause or severity of the accident.

² The laboratory report concluded that the BAC was sufficient to affect reflex and coordination; however, the BAC was not specified.

³ Previously listed on Table 3 as "Proviso, IL."

Table 2a

Listing of 1984 Train Accidents Involving Alcohol or Drugs
for which Data is Insufficient to Establish Impairment as a Causal Factor

Accident Location	Date	Positive Lab Result/Carrier Drugs-Alcohol	Fatalities	Injuries	Railroad Property Damage - Equipment and Maintenance of Way Estimate of Costs	Accident Description
Newcastle, NY	4-22-84	ENGR, BN	2	2	1,358,993	Rear End Collision. Engineer of following train failed to control train in accordance with signal indications. Engineer tested positive for marijuana.
Carbondale, IL	5-26-84	F. Brkm, ICG .0369	-	-	144,907	Rear End Collision. Engineer of following train failed to control train in accordance with signal indication. Front brakeman failed to take appropriate action.
Camden, AK	6-23-84	Fire, MP	-	2	700,750	Side Collision. Fireman operating train and tested positive for marijuana (urine). Engineer left scene of accident. Witness statements indicate he appeared to have consumed alcohol.
Alvarado, TX	10-21-84	Brkm, ATSF	1	1	1,930,391	Side Collision. Engineer failed to control train. Front brakeman tested positive for alcohol, marijuana and methamphetamine (in urine) failed to take appropriate action. According to witnesses, the Engineer may have consumed alcohol.
			3	5	4,135,041	

Table 3

Listing of Railroad Train Accidents Involving Alcohol and/or
Drug Use Reported by Railroad Carriers but not Investigated by FRA
(January 1975 through December 1984)

Accident Location	Date	Reporting Carrier	Fatalities	Injuries	Railroad Property Damage Equipment and Maintenance of Way Estimate of Costs	FRA Cause Code Primary	FRA Cause Code Contributing	Accident Type
Ramsey, WY	08-02-76	UP	-	-	54,128	510	570	Derailment
Huntington, OR	08-16-76	UP	-	-	12,000	510	550	Head on Collision
Jamaica, NY	11-12-76	LI	-	2	38,030	524	510	Side Collision
Tacoma, WA	05-22-78	MILW	-	-	5,200	533	510	Rear End Collision
Memphis, TN	10-19-79	SLSF	-	-	18,000	510	-	Rear End Collision
Morrilton, AK	02-12-80	MP	-	-	24,600	510	-	Derailment
Burnsville, West VA	03-18-80	B&O	-	-	19,000	510	-	Broken Train
Carlsbad/Eddy NM	04-23-82	ATSF	-	-	15,500	510	550	Side Collision
Toledo, OH	10-23-82	Conrail/Toledo Term.	-	2	10,000	520	510	Side Collision
Detroit, MI	07-14-84	NW	-	-	96,695	510	538	Derailment
			-	4	293,153			
						427,591 - Expressed in 1984 Dollars		

Accident Code Descriptives

510 - Impairment of Efficiency and Judgement Due to Drugs or Alcohol
520 - Fixed Signal, Failure to Comply
524 - Hand Signal Improper
533 - Failure to Stop Train in Clear
550 - Coupling Speed Excessive
570 - Buffing or Slack Action Excessive
538 - Shoving movement, absence of man on or at leading end of movement

Table 4

Listing of Employee Fatalities Investigated by FRA
Which Resulted from Train and Non-Train Incidents
Involving Alcohol and/or Drug Use
(January 1975 through December 1984)

Accident Location	Accident Date	Autopsy Yes No	Positive Lab Result Drug Alcohol	Employee Category	Carrier	Accident Descriptive
Charlotte, NC	1-22-75	x	.10	Yard Foreman	SOU	Fell from moving freight train.
Red Desert, WY	7-02-75	x	.159	Track Laborer	UP	Struck by approaching train for which he had failed to provide personal safety clearance.
Secor, IL	8-21-75	Unknown	.146	Switchman	TWP	Struck while in path of approaching train.
Portland, OR	8-31-75	x	.17	Yard Foreman	SP	Struck while in path of moving cars.
Denver, CO	2-15-76	x	.37	Dinning Car Inspector	DRGW	Fell beneath coal train he attempted to climb over coupling device to reach opposite side.
Baltimore, MD	9-05-76	x	.08	Brakeman	UP	Fell while attempting to board locomotive.
Farmville, NC	12-22-76	x	x	Flagman	SOU	Suffocated beneath spill of corn from overturned car. Accident caused by his failure to remove derailing device prior to movement. (type of drug - Impramine)
West Cambridge, MA	5-20-77	x	.19	Brakeman	BM	Struck while in path of approaching train.
Proctor, MN	8-04-77	x	.105	Brakeman	DMIR	Crushed between side ladder of moving locomotive and standing cars (misaligned movement).
Stemmers Run, MD	2-11-77	x	.07	Brakeman	Conrail	Struck by approaching train while he crossed track.
Green River, WY	3-18-78	x	.16	M of W Foreman	UP	Expired from smoke inhalation from bunkhouse stove.
Laramie, WY	9-11-78	x	.36	M of W Laborer	UP	Lost balance and fell beneath train while crossing between moving cars.
Denver, CO	3-23-79	x	.098	Switchman	DRGW	Fell beneath moving train while alighting from caboose.
Ranier, MN	3-27-79	x	.273	Trainman	DWP	Fell beneath caboose from which he was alighting.
Livonia, MI	4-23-79	x	.07	Brakeman	CO	Fell beneath or placed himself in path of a moving caboose.
LaJunta, CO	8-11-79	x	.133	Switchman	ATSF	Fell beneath caboose while attempting to board it.
Chicago, IL	8-12-79	x	.14	Switchman	CNW	Ran over by approaching train while he sat on track.

Table 4
Listing of Employee Fatalities Investigated by FRA
Which Resulted from Train and Non-Train Incidents
Involving Alcohol and/or Drug Use
(January 1975 through December 1984)

Accident Location	Accident Date	Autopsy Yes	Autopsy No	Positive Lab Result Drug Alcohol	Employee Category	Carrier	Accident Descriptive
Wilmington, CA	11-23-79	x		.11	Brakeman	UP	Struck by side collision with car he placed to foul during prior switching movement.
Lubbock, TX	3-23-80	x		.116	Yard Helper	ATSF	Fell beneath moving cars while crossing from one side to the other to facilitate an uncoupling. Drug type not identified.
St. Louis, MO	9-05-80	x		.111	Switchman	MP	Fell beneath moving cars he was attempting to uncouple.
E. St. Louis, IL	11-02-80	x		.102	Clerk Messenger	NW	Operated company highway vehicle onto interstate highway against current of traffic and collided with another vehicle.
St. Helens, OR	2-11-81	x		.08	Brakeman	BN	Signaled to initiate movement and did not stand clear of it.
Hotchkiss, CO	2-19-81	x		.336	Track Patrolman	DRGW	Fell from on track inspection vehicle while it was in motion in an apparent state of unconsciousness.
Calamus, OR	3-19-81	x		.38	Brakeman	SP	Alighted from locomotive into path of approaching train.
Eola, IL	10-28-81		x	.104	Yard Clerk	BN	Placed himself in path of approaching train.
Potts Valley, VA	3-01-82	x		.36	Carpenter	NW	Fell from bridge to river. Safety belt/line not secured.
Claymont, DE	4-19-82	x		.155	Lineman	Amtrak	Electrocuted when he progressed with work prior to power being shut-off.
Amherst, MA	5-26-82		x	.034	Machine Operator	CV	Drove equipment into path of approaching train.
Paxton, NE	12-10-82	x		.02	Machine Operator helper	UP	Dismounted machine from live side into path of approaching train.
Concord, KY	4-28-83	x		.29	Trackman	CO	Struck by approaching train while inspecting track.
Villa Grove, IL	5-03-83	x		.18	Conductor	MP	Struck while in the path of the movement of his train.
Elkhart, KS	7-07-83		x	.35	Brakeman	ATSF	Struck by overturning car for which he was to control movement.
Kearny, NJ	9-30-83		x	.085	Trackman	ATX	Struck by train.
Enola, PA	6-30-84		x	.167	Brakeman	CR	Struck by freight car.
Napfor, KY	8-25-84	x		.27	Trackman*	SBD	Struck by train.

*Living in camp car -- off duty at time of accident.

Summary of Employee Category and Type

Train/Engine Service	- Train	21
	- Engine	-
Transportation (Other)	- Yard Clerk	1
	Messenger	1
	Dining Car Inspector	1
Maintenance of Way	- Track Patrolman	2
	Track Laborer	4
	Foreman	1
	Carpenter	1
	Lineman	1
	Machine Operator	1
	Machine Operator Helper	1
	Grand Total	35

Comments on the Accident Data

Preface to the comments. FRA cannot escape the necessity to comment on the role reversal demonstrated by the comments in this rulemaking. Historically, the railroads urge before this agency and the Congress that the industry operates with a generally high level of safety (as it has, particularly in recent years). Employee organizations, on the other hand, traditionally stress the risks to their safety posed by the remaining hazards. Indeed, in recent years labor organizations have filed numerous law suits challenging FRA administration of the Federal railroad safety laws and regulations without the foundation of specific accident data such as the data presented by FRA in this rulemaking. FRA, as custodian of the public's interest in both safe and efficient transportation, has consistently sought to make sense of both these positions in relation to the particular regulatory subject matter. In some cases that task has been made more difficult by the unstated economic agendas that inevitably influence positions taken on safety regulatory issues.

In the current rulemaking the traditional roles are substantially reversed. Labor representatives generally argued that the safety problem associated with alcohol and drugs has been blown out of proportion, while railroad commenters have viewed the problem as more serious. FRA has considered these comments, but has also endeavored to formulate its own judgment with respect to the public policy significance of the accident data and accident potential.

Comments. Although the commenters generally did not submit information bearing on the specific accident data advanced by the NPRM, there were a number of comments bearing on its relative significance for public policy. In written and oral comments, a union officer at the state level cited statistics on total railroad accidents, trip reports, miles operated, trains dispatched, and the like for the apparent proposition that the documented alcohol and drug accidents are not statistically significant. Interspersing quotations from press accounts on the problem to illustrate the alleged misperceptions of those presumed to influence public opinion, the commenter sought to persuade FRA that "alcohol and drug use in the railroad industry is very minor." Another state-level union officer took a similar approach.

A national UTU officer cited statistics from the recent General Accounting Office review of alcohol and drug use on the railroads for the proposition that

alcohol and drug-related accidents are a very small part of the total railroad safety problem. A UTU member said that the alcohol and drug problem is much less serious than that of track and equipment-caused derailments.

By contrast, the president of a major railroad said that "the true extent of human suffering—and property damage—that result from alcohol and drug use in the railroad industry is understated." The AAR added the following:

[A]lcohol and drug abuse poses a particular problem for the railroad industry because of the potential for widespread disaster stemming from actions of an employee influenced by alcohol or drugs . . . It would be a dereliction of duty for the railroads and FRA not to utilize every weapon at their disposal to curb alcohol and drug abuse on the railroads.

Significance of the Prevalence and Accident Data

Both the data bearing on the extent of the alcohol and drug use problem in the railroad industry (prevalence of use and job-related use) and the accident data must be considered in determining whether alcohol and drug regulations are reasonably "necessary" to safety. The accident data are crucial to understanding the actual and potential consequences of job-related use. The circumstances of the individual accidents are of interest in attempting to determine whether the accidents could have been prevented by reasonable measures. Prevalence data is useful in identifying potential accident exposure, formulating qualitative judgments concerning the extent to which alcohol and drug involvement in accidents may be under-reported, and determining on the one extreme whether the affected population is a minute and intractable minority (and thus virtually impossible to find before an accident) or, on the other, whether the problem is spread over a vast number of lightly-affected employees (perhaps drawing into question the capacity of the industry to apply certain countermeasures to the target population).

Based on its review of accident investigation files and reports, as well as the aggregate data, FRA believes that the accident picture is both serious and susceptible to modification. Prevalence data tends to confirm the strong indications that the accident, casualty and damage statistics (tying alcohol or drug involvement to particular accidents) are incomplete. At the same time, it is clear that the target population of actual and potential Rule G offenders, while significant, is not beyond the capacity of disciplinary systems or EAPs

to handle (although some additional resources will likely be required).

Ideally, it would be desirable to combine prevalence and accident data in an incidence/over-representation study such as the studies undertaken in the motor vehicle field (showing that impaired employees are more likely than non-impaired employees to become involved in accidents). Unfortunately, there are almost insuperable obstacles to obtaining reliable and statistically significant data of both kinds for any given time period. But even if such a study were to be feasible, it would make little sense at this juncture to delay needed responsive action while employees and members of the public gave their lives to prove what is already widely accepted by those with expertise in this field. Virtually all commenters in this rulemaking have agreed with the proposition that alcohol and mind-altering drugs have effects on employee performance that are inconsistent with the safe discharge of their safety-sensitive functions. Both FRA and the NTSB share strong convictions with respect to alcohol involvement in the accidents and incidents reported above (with the qualification that NTSB has not completed its formal review of all accidents that occurred in 1984). Alcohol, in particular, is known to be a safety problem in every major arena of life where risks and alcohol use correspond. There is no reason to believe that the situation is different on the railroads and every reason to believe that it is the same.

Fortunately, the railroads employ a variety of redundant safety systems (including multi-person crews on through trains) that limit the number of cases in which impairment results in tragedy. Unfortunately, it is sometimes the case that both the primary and secondary safety systems fail simultaneously. When this occurs, the public is put at risk.

Alcohol and drug involvement in major accidents. From the point of view of overall accident statistics, such as total train accidents and total casualties, there is little question but that documentation of the alcohol and drug problem is limited. This is especially true when one focuses only on the railroad-reported statistics. For instance, in 1983 the railroads reported 3,906 train accidents, but indicated alcohol or drug involvement in only 2 of those accidents (both of which were investigated by NTSB, FRA, or both agencies). This is not atypical. Alcohol and drug involvement in other train accidents is either not detected or not reported. Railroad-reported data on alcohol and

drug involvement in train incidents that produce personal injuries is not available because the current reporting system does not ask for it, and anecdotal evidence is very fragmentary.

Why, if this is the case, are FRA and many other informed observers demonstrably concerned? The reason is that a partial review of the statistics is misleading, and another dimension must be examined. More careful review suggests that alcohol and drugs play a significant role in precisely those categories of accidents that threaten the public safety and claim the lives of employees and members of the public—i.e., the accidents that are the highest priority for action by FRA.

For instance, during the period January 1982 through August 1984, there were 33 train accidents on the Nation's railroads that resulted in fatalities, exclusive of accidents at rail/highway grade crossings (a category with respect to which the public sector response is massive and with respect to which rail employee impairment is unlikely to be a major factor). Of the 33 fatal train accidents, at least 3 (9 percent) can be attributed to alcohol impairment. Those 33 accidents caused 59 fatalities, of which at least 9 (15 percent) resulted from the accidents involving alcohol.

In the NPRM, FRA explained that where autopsies were available for employees killed in train incidents, 22 of 136 cases (16 percent) showed positive results for significant levels of alcohol or other drugs (principally alcohol). (This percentage, incidentally, is much higher than the most pessimistic estimates of job-related alcohol or drug use for any given duty tour.) This was true despite the fact that not all autopsies contained toxicological analyses. NPRM at 22-24; 49 FR 24265, 24266. To this information should be added the fact that most toxicological analysis performed during the period probably was not capable of detecting the presence of many drugs of abuse at all significant levels.

In short, alcohol, in particular, is a significant problem affecting the number of fatalities resulting from railroad operations. Further, the potential exists for significant accidents affecting the public. For instance, the Livingston, Louisiana, derailment of September 28, 1982, was one of the most serious hazardous materials accidents in the United States since 1980, resulting in the release of hazardous materials and a major evacuation.

Potential for catastrophic accident. An accident like Livingston could happen again, with even more grave consequences. The railroads transport large quantities of explosives, flammable gases, flammable liquids, and

poisons, including products capable of producing both short and long-term damage to the environment. An example of a product which presents a large risk of open-air detonation is propane. A single tank car may contain 30,000 gallons of that product, sufficient to create a large vapor cloud and inflict damage over a wide area if ignited. The railroads also carry many of the same chemicals that have caused major public concern when accidentally released from chemical factories.

Although the Department of Transportation has required tank car builders and owners to expend millions of dollars upgrading their equipment to make it more crashworthy, no container can withstand the kinetic forces associated with a high-speed accident that happens to follow a particularly destructive pattern (as when cars are turned at a sharp angle to the track centerline and "stack up" on one another in a major derailment or collision).

Indeed, despite improved track, safer equipment, improved training, and lower normalized accident rates overall compared with five years ago, the potential for a catastrophic hazardous materials accident still exists. FRA continues to work through regulatory development and enforcement efforts to limit the degree of this risk. However, any strategy that omits countermeasures directed at the problem of alcohol or drug impairment is incomplete.

Similarly, alcohol and drug impairment threatens the safety of passenger operations. Not only must crews of passenger trains be free of alcohol and drug impairment, so must the crews of freight trains that operate over the same rights-of-way. If we have not yet experienced a serious passenger train accident for which alcohol or drug involvement has been documented, it must nevertheless be remembered that the potential exists.

Railroad Lifestyle and the Need for Action

Working Conditions and Regulation

Throughout this rulemaking it has been suggested by some labor representatives and others that alcohol and drug use is a manifestation of a problem, rather than the problem itself. According to this line of argument, FRA should be concentrating on the improvement of railroad working conditions generally—particularly better recreational opportunities at away-from-home terminals, greater regularity in railroad work schedules, and better advance notice of unscheduled assignments.

It is impossible to determine whether railroad working conditions actually contribute materially to alcohol and drug use patterns. Certainly in some respects they may. Labor and management clearly need to work on mechanisms to limit layovers at away-from-home terminals. Such layovers mean idleness away from the employee's family, most often under less than ideal conditions.

By the same token, it is not possible to conclude that alcohol and drug use is exclusively a function of boredom or irregular hours. Excessive use of alcohol can be found in many meccas of leisure-time activity, where entertainment and cultural enrichment are available on every hand. Drug abuse can be found even among those who work regular shifts.

FRA believes that substantial control of alcohol and drug use patterns in the railroad industry can be achieved despite any conditions that may tend to foster or aggravate them. Indeed, the problems of irregular hours, short calls, and disrupted body rhythms make it all the more important that alcohol and drug use be brought under control. Substance abuse cannot cancel out the effects of fatigue or depression; to the contrary, uncontrolled alcohol and drug use can only make the situation worse. Many of the accidents reviewed for this rulemaking apparently involved inattention or sleep by one or more employees; and the evidence is strong that alcohol or drug use exacerbated pre-existing propensities for such behavior.

FRA is not authorized to engage in a wholesale reordering of economic relationships, railroad crew calling practices, and housing arrangements at away-from-home terminals in the hope that experimental regulations will tend to promote improved performance. Indeed, the Hours of Service Act, which already bears many marks of labor-management influence, occupies much of this field and effectively precludes comprehensive regulation under the Federal Railroad Safety Act.

FRA can offer means of controlling alcohol and drug use; and employees and the railroads can bring about significant improvements in safety if they continue to view their use as a common enemy.

"Cut System" Proposals

FRA has also considered the views of employee representatives who have urged the adoption of provisions permitting employees to "mark off" when they are given short notice of unscheduled assignments. FRA

recognizes the legitimate interests of both the railroads and their employees with respect to availability for unscheduled service. Although current collectively bargained arrangements clearly contemplate that certain employees hold themselves in readiness for extended periods of time, and labor has as great an economic stake in those arrangements as management, multiple factors indicate that the parties should re-examine current arrangements, particularly the extensive use of extra or "spare" boards for employees in train or engine service. The issues attendant to this practice go far beyond the problem of the employee who fails to estimate correctly his call time and is "caught short" by a call received just after the employee has consumed an alcoholic beverage. In many cases, extra board work means extremely irregular hours, producing fatigue and disruption of normal body rhythms.

The Hours of Service Act is only a very limited control on this problem. It provides the assurance that an employee will have an opportunity to rest, without consideration for the timing of the rest in relation to previous sleep cycles or the anticipated upcoming duty tour. Responding to this set of problems is a matter far beyond the scope of this rulemaking. The parties may find solutions in more adequately staffed extra boards, more scheduled assignments, or a more liberal policy that would permit employees to mark off without penalty if a short call catches the employee in any way unrested or unfit to work.

This problem will not be solved by taking the position that all proposals for the adjustment of existing contractual provisions relating to unscheduled service are intended to accommodate the problem drinker or drug user. Progress will be made only if management takes the position that this is an issue of health and welfare, as well as personal convenience, and if labor recognizes that concessions will have to be made that may limit the desire of some employees to maximize earnings through maximum availability.

FRA believes that the frustrations with current arrangements that have been expressed repeatedly in this rulemaking can provide an impetus to constructive collective bargaining. FRA will watch with interest to ascertain whether, and to what degree, the parties make progress toward a more rational and humane system. We do not rule out the possibility of regulation should they fail to do so.

Difficulty of Detection

Several provisions of the proposed and final rules mandate, or authorize, use of breath or body fluid testing to ascertain whether alcohol or drugs have been used and, if they have, the extent of that use and likelihood of a resulting performance impairment. One of these provisions (post-accident toxicological testing) does not involve a foundation of specific behavioral or clinical indications that can be directly related to alcohol or drug use, but rather the occurrence of an event that suggests the probability of human failure (or the possibility of human failure coupled with a high degree of public interest in determining cause). The provision authorizing the railroad to conduct breath and urine tests also contains categorical criteria directed at situations where fitness is called into question. In the case of pre-employment drug screens, testing is also mandated in connection with a medical examination.

The reader who has not been involved in the process of public participation may well ask why it is necessary to authorize testing when the employee does not show outward signs of impairment. The answer to that question is straightforward: in a significant proportion of cases—probably a clear majority of the cases involving violations of this final rule—there may be no external signs detectable by the lay person or, in many cases, even the physician. Reliance upon traditional detection techniques will not provide the capability to detect on-the-job impairment, let alone the kind of drug use habits sought to be identified in pre-employment drug screens.

The result of uneven detection is reduced deterrence. Therefore, it is crucial that a detection capability be provided if alcohol and drug-related accidents and casualties are to be prevented.

Both alcohol and the variety of controlled substances pose detection problems. Obviously, the majority of railroad supervisors are better able to detect extreme alcohol impairment than drug impairment. The signs are generally more obvious, the order of alcoholic beverages provides a more distinctive cue (in some cases), and supervisors are generally either social drinkers themselves or have spent extended periods around social drinkers. Supervisors may even have had the opportunity to see a given employee both sober and clearly intoxicated (it is to be hoped off the job) so as to provide benchmarks for evaluation.

However, even the effects of alcohol do not always provide clear indications.

Alcoholics and other habituated drinkers may be able to achieve elevated BAC's (even in excess of .30 percent) without showing outward signs that would be evident to a person with limited training. Indeed, a person with extensive training might not note the effects unless that person were making specific inquiry. (This does not mean these drinkers are safe to work with. Acquired tolerance for alcohol is likely selective, and even the habituated drinker may drink in excess of the selective tolerance level. Indeed, most alcoholics do so with some frequency.)

As FRA noted in the NPRM (without subsequent contradiction), research indicates that social drinkers, bartenders, and even some police officers cannot accurately judge levels of intoxication. Langenbucher, J.W., and Nathan, P.E., "Psychology, Public Policy, and Evidence for Alcohol Intoxication," *American Psychologist*, 38(10):1070-1077, 1983. The problem is two-edged. It is possible for an observer to rate a sober person as intoxicated. But it is also possible for an observer to rate a person sober who has achieved a BAC of .10 or more (even if the subject is not an alcoholic or heavy drinker).

The fact that medical personnel become involved, as in a case of an injury to an employee, may not appreciably improve the situation. Many emergency rooms regularly test blood samples for ethanol precisely because they can miss even high blood alcohol level during triage. Indeed, hospitals have experimented with use of breath testing devices in an effort to more quickly determine blood levels. Gibb, Kenneth A., M.D., et al., "Accuracy and Usefulness of a Breath Alcohol Analyzer," *Annals of Emergency Medicine*, 13(7):516-520, 1984. The problem of detection may be particularly severe where the alcohol impaired person is injured. Although the medical facility may determine the blood alcohol level incident to diagnosis, public records may not reflect that determination (unless a deliberate effort is made to do so); and officials responding to the accident may fail to note the impairment. See, e.g., Maul, Kimball L., M.D., et al., "Culpability and Accountability of Hospitalized Injured Alcohol-Impaired Drivers," *Journal of the American Medical Association*, 252(14):1880-1883, 1984 (of 37 cases with elevated blood alcohol levels, investigating officer made no determination regarding alcohol ingestion in 13 cases; 5 of the remaining 24 subjects were thought not to have been drinking).

It has recently become possible to evaluate alcohol use by a horizontal gaze nystagmus test (precise measurement of eye movement). However, use of this technique requires considerable training and practice; it is not presently a substitute for more direct measurement of blood alcohol levels; and it does not appear likely that any significant portion of railroad supervisors could be qualified in this technique, given the many competing demands on their time and attention.

If detection of alcohol use is difficult, detecting the use of the wide variety of controlled substances presents a challenge that is even more formidable. Many drugs of abuse produce effects much more subtle or complex (and sometimes more pernicious) than alcohol. Although cases of more extreme drug intoxication (or withdrawal) may produce symptoms and behaviors sufficient to trigger detection, most drug abusers will be careful to control their demeanor when there is a threat of detection. Commenters in this rulemaking generally recognized this problem, although labor spokesmen sometimes contended that co-workers know who is doing drugs (in some cases, presumably, because of the admissions of the drug user or observation of drug use).

At least one large metropolitan police department has begun developing techniques for evaluating subjects to determine drug intoxication by category of substance, using highly trained and practiced observers. However, the utility and transferability of this expertise is only now being evaluated. Certainly there are no shortcuts on the horizon.

Although it is possible to provide railroad line supervisors with enough information to evaluate egregious cases and from a reasonable suspicion of drug impairment sufficient to warrant further evaluation (or testing), it is not realistic to suppose that supervisors can do what physicians, police officers and others cannot—readily detect drug use by a substantial portion of persons who are currently impaired. Again, many hospitals routinely run drug screens on patients admitted for treatment precisely because of the difficulty of detection (and the need both to respond to problems of toxicity and avoid interactions with therapeutic drugs) and the potential confusion between drug use symptoms and other physical or mental problems.

In sum, to decide that alcohol and drug use in railroad operations will be dealt with only where acute effects are so dramatic as to become Motorious would be to acquiesce in the continuation, and potential growth, of

this problem. From the point of view of regulatory strategy, the only present alternative to such acquiescence is the selected use of breath and body fluid testing. With reluctance, but without regret, FRA has chosen that alternative.

Summary of Conclusions

On the basis of available information, including comments submitted in response to the ANPRM and NPRM, FRA has determined that final rules should be issued to control alcohol and drug use in railroad operations. The problem of job-related alcohol and drug use by railroad employees is significant and can be shown to have significant, unacceptable consequences. Control of this problem is necessary both to prevent accidents and casualties of the kind already experienced and to reduce further the risk of a truly catastrophic accident. FRA's conclusions and analysis are contained in this document and, to the extent not superseded by this document, in the NPRM. FRA's conclusions are broadly summarized below.

Conventional methods of controlling the alcohol/drug problem have proven inadequate by themselves. Rule G enforcement, while crucial to control of volitional drinking and drug use, has been hampered by inadequate means of detection, limited incentives for self-referral, and the reluctance of co-workers to identify the offender. Accordingly, most violations do not come to the attention of management and the intended deterrent effect of the rule is compromised. EPA's have made major strides in addressing the problems of employees with substance abuse problems, but even the best of the programs have been unable to attract early participation by many in the target population. Education and awareness efforts, while helpful in modifying attitudes if coupled with institutional changes, cannot be expected to solve the problem alone. (For further analysis see NPRM at 26-52; 49 FR 24268-24271.)

Exclusive reliance on voluntary programs is not warranted by available information and would be detrimental to the voluntary programs themselves.

FRA is encouraged by the progress of employee representatives and the railroads in implementing the elements of Operation Red Block, including active participation by employees through their union organizations in prevention and referral activities. It may be that several years' experience with the new voluntary programs will demonstrate their effectiveness and durability to such a degree that regulation and enforcement can be modified to a significant extent. However, it is not yet

clear that this is the case. Indeed, the drive toward Federal regulation, and the extensive process of factfinding and analysis that has accompanied it, has actually provided the foundation for the current voluntary initiatives. It is more likely that reasonable enforcement practices and active labor-management cooperation in prevention programs will reinforce one another than it is that either approach can replace the other.

It would be a retreat from responsibility to conjecture that voluntary programs can do the job alone. FRA withheld regulatory action for over a decade after passage of the Federal Railroad Safety Act of 1970 precisely for the purpose of promoting voluntary solutions and promoting their implementation. Although much was accomplished during that period, it has become evident that much more needs to be done. The programs now being launched under the rubric Operation Red Block are conceptually sound and offer great promise. However, they lack the kind of national track record that would permit any evaluation of their effectiveness over the long term.

Information presented on Operation Red Block during the process of public participation in response to the NPRM indicated that the experiment is still in its infancy. Some witnesses testified on the basis of only a few months' experience with the program. While some components of the concept have been tested on a small scale, the long term viability and durability of the approach must necessarily be demonstrated over a period of several years and on a representative group of railroads. There is some question, for instance, whether programs requiring heavy employee involvement (or "ownership") can be successfully transplanted to those railroads where labor-management relations are generally less favorable to the growth of such cooperative ventures. It remains to be seen whether the partnership approach of Operation Red Block can actually serve as an "ice breaker" in the labor relations on those properties. In short, although there is every reason to promote voluntary programs and to believe that they offer hope for turning the problem around over the long term, there is no basis for pulling back from necessary regulatory initiatives.

Indeed, Federal regulations of the kind issued in this final rule will actually undergird and sustain voluntary initiatives for several reasons. First, adoption of Federal standards expresses the public's interest in the prevention of alcohol and drug-related accidents. Second, imposition of a continuing legal

duty on the railroads to prevent job-related alcohol and drug use reinforces management's commitment to finding solutions. Third, better documentation of alcohol and drug involvement in accidents provides the best illustration of the need for voluntary action and a continuing barometer of its success or failure. Fourth, the enhanced detection capacity offered by this rule will help to reduce co-worker tolerance of job-related substance abuse by lending credibility to the co-worker's contention that the alcohol and drug abuser risks discipline against both the offender and other employees.

Absent the issuance of regulations, the industry will not undertake optimal responsive action. It is not reasonable to believe that the railroads will be able to make significant strides in addressing alcohol and drug use without the encouragement and tools provided by regulations. Unlike companies in some other industries, the Class I railroads are generally self-insured. There is no effective policing of safety practices by insurance carriers. (Catastrophic coverage is often purchased on the international market and is not believed to be experience rated to the particular client in any sense relevant to this rulemaking.)

Although the railroads clearly desire to prevent alcohol and drug-related accidents, and have obvious incentives to do so, the policy of the Railway Labor Act, as construed in arbitration and in the courts, severely limits the ability of management to implement new techniques to control the problem. FRA has previously described Award No. 23334 of the First Division, National Railroad Adjustment Board (June 25, 1982), which blocked the attempt of a western railroad to institute random breath testing of employees by use of a portable device. The Board ruled that compulsory testing was not authorized by existing collective bargaining agreements and that requiring employees to submit to such testing was inconsistent with longstanding custom and practice under those agreements. The breadth of the language used in the award suggests that other, more limited programs of testing would also be deemed to offend the status quo policy of the Railway Labor Act, if implemented by unilateral action of management.

In theory, of course, the railroads could bargain with employees to obtain the right to test. But history suggests that there is no real likelihood that such an agreement could be reached, and the "section 6 notices" served prior to issuance of the NPRM in this proceeding

did not even address the subject. Management has matters of greater economic significance that it must keep at the top of its bargaining agenda. Employee representatives would naturally insist on concessions of various kinds in exchange for the right to test, and it is not clear that all of the relevant crafts would ever agree to compulsory testing. Even under the best of circumstances, there is no one at the negotiating table representing the interests of public safety; and the testing issue has too great a bearing on the public interest to become intermixed with other negotiating points.

In addition to the issue of capacity, it is necessary to consider the issue of commitment. FRA has concluded that the managements of some railroads and their counterparts in some railway unions remain unaware of the threat that alcohol and drug use poses to the safety and efficiency of their operations. Although recent accidents and this rulemaking have had the salutary effect of confronting some of the railroads with the extent of their problems, much remains to be done. Just as the promotion of voluntary programs requires constant attention to the consequences of alcohol and drug use, so effective management action will be sustained only if the railroads perceive a continuing need. Again, careful documentation of this problem through post-accident toxicological testing and improved accident reporting will be critical to its resolution.

The issuance of necessary and appropriate Federal regulations is required by sound policy and prevailing law. Piecemeal action by individual States is not a viable alternative to Federal regulation. State agencies with jurisdiction over railroad safety report little or no activity directed specifically at the prevention of alcohol and drug-related accidents. At the same time, recent publicity concerning this problem has prompted interest on the part of legislators and others in State government. As explained in the NPRM (pgs. 25-26; 49 FR 24266), it is essential that any regulatory strategy be implemented on a national scale in order to ensure the uniformity mandated by section 205 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 434) and avoid uneconomic and potentially conflicting requirements. The National Association of Regulatory Utility Commissioners has recognized this imperative by supporting the proposed rules. The program of State participation in investigations and surveillance under the Federal Railroad Safety Act offers a mechanism for tapping the resources of

State government without imposing inconsistent regulatory requirements on the railroads (see 49 CFR Part 212).

Finally, FRA enjoys limited discretion in determining whether to regulate this field. Section 202 of the Federal Railroad Safety Act (45 U.S.C. 431) requires the Secretary of Transportation to "prescribe, as necessary, appropriate rules, regulations, orders, and standards for all areas of railroad safety" The statute, of course, entrusts this determination to administrative judgment. But the information and views before FRA present a compelling case for determining that regulation is, in fact, necessary to the achievement of the statutory objective.

The proposed rules should be adopted with significant modifications responsive to the comments. As reflected above, FRA has carefully considered whether the issuance of regulations is necessary to safety and has concluded that it is. In proceedings on the ANPRM and NPRM, FRA has also reviewed a wide range of alternative regulatory strategies and has identified those approaches that appear to be most appropriate to control of alcohol and drug use. Based on review of the comments submitted in response to the NPRM, FRA has determined that the proposals advanced by FRA should be adopted with important modifications designed to ensure their proportionality, effectiveness, and fairness.

Final Rule Provisions (With Section-by-Section Analysis)

This segment will discuss the final rules as adopted. Each unit within this discussion sets forth a summary of the proposed rule, comments on the proposal, FRA analysis, and a description of the final provision. FRA has carefully reviewed all comments submitted. In preparing this summary, however, FRA has omitted reference to some comments that were repetitive of points raised in response to the ANPRM and discussed in the NPRM, as well as comments that were clearly beyond the scope of the NPRM.

Style and format. FRA has elected to edit the entire rule text, including those portions of the rule that are preserved without substantive change from the NPRM. In doing so, FRA has attempted to respond to those commenters who urged directness and clarity. Nevertheless, the complexity of the issues that emerged during the rulemaking has required that the rules anticipate a variety of contingencies while making clear the extent to which they affect, or do not affect, collateral

matters. Therefore, the final rule text is somewhat lengthier and more detailed than the proposed rules.

FRA has also identified the need to display the regulatory text in a more suitable format. The bulk of the proposed rules were organized as a new subpart proposed for inclusion in Part 218 of Title 49, Code of Federal Regulations. However, use of the subpart format required numerous levels of subdivisions with individual sections, making it difficult for the reader to follow the flow of the rule without undue effort. Use of a new part (Part 219) will facilitate better organization, easier reading, and (as necessary) later amendment. Subject headings have been used in some cases even within subdivisions of paragraphs, solely to guide the reader. The headings do not restrict or modify the application of the rule text.

General Provisions (Subpart A)

Section 219.1 describes the purpose and scope of the new part. The section notes that the new part does not restrict a railroad from adopting and enforcing additional or more stringent requirements not inconsistent with the Federal rules. For example, as noted below, the industry's own Rule G has traditionally been construed to prohibit an employee from reporting for work with any quantity of alcohol in the employee's body. Nothing in these rules in any way restricts a railroad from continuing to apply Rule G in this fashion.

Section 219.3 (§ 218.3 amendment in the NPRM) governs the applicability of the new part. The rule applies both to freight and passenger railroads that operate in the general system of rail transportation and to commuter and other short-haul rail passenger service in metropolitan and suburban areas (as described by section 202(k) of the Federal Railroad Safety Act, as recently amended). As a practical matter, this means that all commuter operations are covered by the new rules.

PATH. The NPRM identified the Port Authority Trans-Hudson (PATH) as a somewhat unique case that should be addressed in the comments (NPRM at 133; 49 FR 24286). PATH is a common carrier by railroad and thus subject to the Federal railroad safety laws and regulations (except where exclusions have been provided). On the other hand, PATH has many physical and operating characteristics similar to rail rapid transit systems, which are not within FRA's regulatory authority. FRA did not receive a filing from PATH with respect to this rulemaking. But the BLE objected to excluding any commuter railroad

from the rules, "particularly one like PATH, since the loss of life and limb in any accident on such properties could be catastrophic."

FRA agrees that, while PATH may have characteristics that might warrant its exclusion from certain other Federal requirements, with respect to the control of alcohol and drug abuse it faces the same issues and accident potential that affect other short-haul passenger operators. Therefore, the rule has been crafted specifically to include PATH.

Small railroads. The other major issue of exclusion or inclusion presented by the comments relates to short line railroads. FRA had proposed to except small short lines from the pre-employment drug screen portion of the rule. A commuter railroad objected to the exclusion for railroads with 15 or fewer Hours of Service employees, as did a major freight railroad. BLE said the exclusion should not apply to any passenger carrier, regardless of size. None of the commenters offered persuasive reasons for their conclusions.

Comments from the ASLRA indicated that proposals for identification of troubled employees might also pose a problem for small railroads, because of the difficulty of holding open a position while the individual receives treatment. More significantly, the ASLRA indicated that the smaller railroads do not report significant alcohol or drug problems or their properties, a representation not inconsistent with available accident/incident data.

FRA believes that the interests of safety will be adequately served if true short line railroads are subject to the prohibition on alcohol and drug use and the requirement for post-accident testing. Clearly such railroads need to guard against alcohol and drug use on their properties. Most of these railroads transport hazardous materials or passengers. In all cases co-workers may be subject to life-threatening hazards from the actions of impaired employees. Where significant accidents do occur that indicate the possibility of alcohol or drug involvement, post-accident toxicological testing should be performed.

On the other hand, the very small railroads have many characteristics that warrant special treatment. As FRA said in the NPRM,

Many such railroads are located in rural communities where applicants are well known to the railroad managers. These smaller railroads usually enjoy closer supervision, carry lighter volumes of hazardous materials, and engage in low-speed operations that pose less [of a] threat to public safety. A disproportionate number of alcohol and drug-related accidents involve

collisions between two trains, and the smaller railroads generally have lower traffic densities that (in combination with lower speeds) make serious collisions quite rare. None of the railroads in this group has experienced a documented alcohol or drug accident since 1975.

NPRM at 170-171 (49 FR 24293).

It is not clear that a Federal authorization for "reasonable cause" breath or urine testing for small railroads is needed or would be of significant utility. Small railroads indicated little interest in Federal authority to test for cause, presumably because their work forces are not organized. However, if such authority were to be conferred, fairness and proportionality would necessitate the imposition of voluntary referral and co-worker report policies, as well.

There is no question that smaller railroads could be at a disadvantage in establishing pre-employment drug screen programs. Again, FRA said in the NPRM,

The costs of testing for these railroads on a per-unit basis would likely be higher than those for larger railroads, since they hire only infrequently and would not enjoy the economies of scale available to larger railroads. It is likely that many do not have formal physical examination procedures, a difference that would also drive up marginal costs. This exclusion will also avoid the imposition of new paperwork burdens on small business entities that are ill-equipped to handle them.

NPRM at 171 (49 FR 24293). The rationale was not directly challenged by the commenters, and FRA remains convinced that the mandate for pre-employment drug screens should not apply to small railroads.

Accordingly, FRA has excluded small railroads from the application of the new Subparts C (Authorization to Test for Cause), E (Identification of Troubled Employees), and F (Pre-Employment Drug Screens). The criterion for exclusion is the same one proposed for pre-employment drug screens, *i.e.*, railroads with 15 or fewer employees in covered service. This criterion is modeled after the waiver provision of the Hours of Service Act (45 U.S.C. 64a(e)), but the railroad will not have to make application to be excluded from the operation of the stated portion of the regulations.

FRA specifically requested comment as to whether any distinction should be made between small railroads that provide passenger service, rather than, or in addition to, freight service. BLE indicated that the exclusion should not apply to passenger carriers of any size,

relying upon its "common sense" judgment.

Although FRA tends to agree that in the abstract applying all provisions of the rule to small passenger carriers might seem desirable, FRA has concluded that this is not practical. Virtually all of the small passenger operations are excursion services. Much of this service is operated on a sporadic or occasional basis. In many cases, trains are handled by part-time employees or even volunteers from the community. Imposing pre-employment drug screen requirements and other detailed policies on such operations would be disproportionate to the legitimate safety concerns surrounding these operations.

The excursion operations are normally conducted at limited speeds over track dedicated to the purpose or under absolute block restrictions. Train handling problems are minimal, and stopping distances generally much shorter than in the case of conventional freight operations (or high-speed passenger operations). The principal safety concerns attendant to these operations involve the maintenance of equipment and track, particularly the condition of steam boilers that power many of the locomotives. FRA carefully monitors the safety of this equipment and track, as well as operating practices, to ensure that the enjoyment of rail nostalgia is not attended by the same loss of life that was so common in the early days of steam transportation.

Obviously, if the results of the post-accident testing program or other information indicates the need to extend these subparts to small railroads (or small passenger railroads), FRA will not hesitate to commence a proceeding to do so.

Section 219.5 (§ 218.101 of the NPRM) defines several terms used in Part 219. A few of these terms deserve separate discussion.

"Covered employee" is defined as an employee who has been assigned to perform service subject to the Hours of Service Act during a duty tour, whether or not the employee has performed or is currently performing such service, and any person who (in fact) performs such service. "Covered service" is service subject to the Hours of Service Act. This is a practical, rather than a craft-based, definition of the persons and functions subject to the regulations. However, the employees that will most often fall within the definition of covered employee are train and engine crews, yard crews (including switchmen), hostlers, train order and block operators, dispatchers, and signalmen. These are the functions identified by the

Congress as being connected with the movement of trains and requiring maximum limits on duty periods and required off-duty periods in order to ensure their fitness.

"Drug" is defined as any substance (other than alcohol) that has known mind or function-altering effects on human subject, specifically including any psychoactive substance and including, but not limited to, controlled substances. This definition is provided to establish a broad frame of reference for treatment of drug issues in the regulations, although it is only use of controlled substances that is prohibited by § 219.101. For instance, it is reasonable from the point of view of safety to apply a voluntary referral policy (§ 219.403) to an employee who has a problem with abuse of a drug not on the controlled substance list (or not yet on that list), even though FRA does not yet have sufficient information to prohibit use of the substance on a system-wide basis.

"EAP Counselor" is retained as a defined term even though it was subject to considerable misunderstanding in the proposed rules. The EAP Counselor means a person or persons qualified by experience, education, or training to counsel persons affected by substance abuse problems and to evaluate their progress in recovering from or controlling that problem. The definition states that the EAP Counselor may be a full-time salaried employee of the railroad or a practitioner who contracts with the railroad on a fee-for-service basis, including a qualified physician.

Note that the definition is based both on qualifications and functions and that the functions may be divided between or among qualified persons. For instance, a railroad could provide that its EAP director will make return-to-service decisions under Subpart E or require that the ultimate decision be made by the railroad's chief medical officer (or a consulting psychiatrist) on the basis of the EAP's evaluation and the report from the treatment center or hospital/clinic providing primary care. The railroad could vest ultimate responsibility in its medical officer but permit the medical officer to delegate the decisional function in broad categories of cases (e.g., drug abuse habits not involving a diagnosis of clinical dependence).

The definition does not permit a manager or line supervisor to make these judgments, unless the supervisor is qualified to do so and acts solely on the basis of the regulatory criteria.

"Impact accident" is a new term used in describing a category of events for which post-accident toxicological

testing is required. "Reportable injury," "reporting threshold," "train accident," and "train incident" are also used in Subpart C.

"Train" is given the same meaning assigned in the regulations governing signal systems (49 CFR Part 236.832). It includes, but is not limited to, a freight, passenger, or work train, a switching movement, or a lite engine. For these purposes, a track motor car or highway/rail vehicle (other than such a vehicle used to move rolling stock) is not a train.

Section 219.7 is the standard provision under which an application for waiver of the regulations may be filed and handled.

Section 219.9 (§ 218.113 of the NPRM) governs the responsibility of the railroad for compliance with the substantive requirements of the regulations and, thereby, specifies when the railroad will be liable for a civil penalty under *Appendix A*. Comments on this element of the NPRM were rather limited. A major railroad expressed concern that it might be strictly liable for failure to comply with post-accident testing provisions because of injuries not reported until after everyone had left the scene or for requiring samples where damage estimates later prove to be excessively high. FRA has clarified the substantive regulation (§ 219.201(c)) to indicate that the railroad is expected to make good faith determinations based on reasonable inquiry and the information available at the time the decision on testing must be made. A railroad is not subject to penalty if it has met this standard, even if it later develops that the criteria of § 219.201(a) were not met.

A second railroad described the penalty provisions as an "unnecessary burden" and contrary to the spirit of cooperation FRA has sought to foster in this area. A local UTU officer made a similar comment, but without explanation. FRA expects to pursue implementation of the regulations in a spirit of cooperation, but is required by law to pursue the application of statutory sanctions in any case where such action is necessary to secure compliance in the present or to promote future compliance. FRA is specifically required by section 209 of the Federal Railroad Safety Act to assign a penalty amount to each regulation that it issues and to pursue collection of the penalty as necessary to accomplish the regulatory objective.

It should also be noted that a failure on FRA's part to qualify the railroads' responsibility for compliance could lead to an inappropriate assignment of liability in a private damage action.

since the statutory standard is one of strict liability.

A short line railroad lamented the fact that civil penalties would be assessed against the railroad, rather than offending employees. FRA has no choice in this matter. The decision to apply penalty sanctions only to the railroads was made by the Congress during consideration of the Federal Railroad Safety Act in 1970.

A major freight railroad suggested that the rules be swiftly finalized but that the penalty schedule be made effective one year later. FRA included the penalty schedule in the NPRM at the express request of the railroads (in order to facilitate public comment). No comments were, in fact, submitted on the dollar amounts assigned in the schedule. Therefore, FRA is not aware of any legal or practical justification for failing to make it effective immediately. However, since passage of the Federal Railroad Safety Act it has consistently been FRA's practice to promote compliance in the early stages of regulatory implementation through measures short of civil penalty assessment—except in obvious and egregious cases. FRA recognizes that, given the regulatory subject matter, it will be crucial to establish positive working relationships with both management and labor on the railroad properties. In a later section of this preamble FRA discusses the implementation conferences that will begin this process.

The penalty schedule located in Appendix A is consistent with the overall order and scheme of the penalty schedule proposed in the NPRM. The amounts of the penalties have been carried forward. Where penalties have been added to the schedule, to either improve clarity or to aid administration, the penalty levels are commensurate with the levels proposed in the NPRM.

The basic penalty provisions remain. For instance, penalties for violation of § 219.101 of the rule, where the railroad requires or permits an employee to go or remain on duty while impaired, correspond to NPRM penalties under § 218.103. Penalties for failure to conform with requirements for post-accident testing correspond to those assigned to § 218.105 of the NPRM.

Similarly, penalties for violations of § 219.301, the authorization to test for cause, follow from penalties for violation of NPRM § 218.109. Penalties for failure to adopt and implement policy required by Subpart E of the Rule and penalties for failure to meet pre-employment drug screen requirements of Subpart F reflect the NPRM penalties.

The creation of additional items in the schedule reflects either a decision to assess a specific penalty for violations contained in the NPRM catch-all provisions, i.e., failure to observe other requirements, or the need to respond to changes in the final rule. In both cases the penalty amount is within the range contemplated in the NPRM penalty schedule. For example, the penalty for violation of the § 219.209 requirement to provide a written report where a sample is not provided in a post-accident situation is new, yet it is anticipated in the NPRM penalty for failure to observe other requirements of post-accident testing, and is in keeping with the penalty schedule for a § 225.11 violation of reporting requirements. (See 49 CFR Part 225, Appendix B.)

In general, the penalties are intended to reflect amounts that would tend to encourage routine compliance, recognizing that not all violations will be detected or documented. However, the schedule recognizes the importance of persuasion as the margin, i.e., the importance of the prospect of a stern sanction in those cases where a railroad officer might be tempted to engage in deliberate non-compliance for reasons of expediency.

The schedule also recognizes that the best sanctions for certain prohibited conduct will be effected by private mechanisms. For instance, if an employee is suspended as a result of a breath or urine test that was poorly conducted, the most effective remedy will be the award of back pay and benefits to the employee by the board of arbitration.

Perhaps the most difficult portion of the rule for any railroad to satisfy is the implicit requirement of § 291.9(a)(2)) (218.113(a)(2) of the NPRM) that the railroad "exercise due diligence to assure compliance with section 219.101 by a covered employee." This provision calls on the railroad to exercise a high degree of supervisory vigilance to prevent job-related alcohol and drug use, possession and impairment. FRA received no comments suggesting that this standards be diluted.

Section 219.9(a)(1) (§ 218.113(a)(1)) also presents a challenge by barring any railroad from knowingly requiring or permitting a covered employee to go or remain on duty in covered service in violation of the alcohol/drug prohibition rule. As is always the case in the law, knowledge on the part of an employee or agent of the corporation is imputed to the corporation. This rule may be applied in a regulatory context to limit the imputation of knowledge where the employee or agent's responsibilities do not pertain to the subject matter at

hand. However, in the railroad environment, carrier rules generally impose broad duties on all personnel to report unsafe conditions and practices that may come to their attention. The proposed rule would have imputed to the company knowledge of any employee or agent other than the offending employee or that employee's co-workers. Amtrak said that imputed knowledge should be further limited to knowledge obtained by a "railroad management employee or a supervisor in the offending employee's chain of command." The final rule adopts a formulation similar to that suggested by Amtrak.

Section 219.11 requires that covered employees consent to breath, urine, and blood testing under the circumstances specified by Subpart C (post-accident toxicological testing of blood and urine) and Subpart D (reasonable cause testing of breath and urine). Consent to the tests is both required and implied as a matter of law. It is true that employees will retain the raw power to refuse testing, since the regulations do not authorize physical coercion. However, employees will not enjoy the right to refuse; and any refusal will be unlawful. The minimum consequence of a refusal to submit to post-accident toxicological testing is set forth in § 219.213, since FRA mandates those tests and the railroad should be on notice of the minimum required action in relation to such a refusal. The consequences for refusing a test under Subpart D (reasonable cause) are those provided under the railroad's disciplinary standards and procedures, since the railroad is the initiating party.

The final rule does not contain the consent form requirement for post-accident testing, but instead contains several provisions intended to substitute for that requirement. Section 219.11(c) requires each employee to consent to release of remaining portions of body fluid samples taken for diagnostic purposes by treating medical facilities and the results of tests on those fluids and the results of any hospital lab tests (which may be performed on samples used up in the testing process that were taken prior to the samples taken under the FRA requirements). The provision also requires the employee to consent to release of information concerning any drugs administered after the accident but before samples were taken for diagnostic or FRA purposes (in order to not to confuse the analysis). Section 219.11(d) requires the employee to execute a consent form for the taking of samples and their release for toxicological analysis under Subpart C.

if the medical facility requires execution of such from as a condition of assisting in the sample collection process.

Although execution of such a from is probably not required to protect the medical facility from liability (since the regulations are explicit on the consent required), it became clear during the rulemaking that, as a practical matter, the medical facility may require the further assurance provided by a form of its own design. Obviously, this requirement does not require an employee to waive any claim for malpractice with respect to the drawing of blood or proper handling of the samples (matters for which the practical exposure is, in any event, negligible).

Section 219.11(f) goes beyond the proposed rule to the extent that it requires non-covered employees, as well as covered employees, to consent to removal of necessary body fluid and/or tissue samples for toxicological analysis under Subpart C. Fatal train accidents and train incidents involving alcohol and drugs very often result in the death of the impaired employee. Obtaining adequate samples for toxicological analysis in the case of fatalities to non-covered employees will begin to provide the kind of data required to determine whether the rules adopted here should be extended to employees engaged in functions that support railroad operations, such as maintenance of way and structures, car and locomotive inspection and maintenance, and similar activities. FRA believes that this modest extension of the NPRM proposal is warranted on the basis of the public proceedings already undertaken, which included extensive discussion of this issue.

FRA has the authority to obtain these samples under section 208 of the Federal Railroad Safety Act, but creation of the implied consent requirement will facilitate the acquisition of this evidence in a more timely manner and on a more regular basis. Timely action is particularly important here, since delay would mean that the body is embalmed and, in many cases, buried before action can be taken to compel production of the samples.

Section 219.13 addresses the preemptive effect of the regulations, which are issued under the authority of the Federal Railroad Act of 1970. Section 205 of the Act reads as follows:

The Congress declares that laws, rules, regulations, orders, and standards relating to railroad safety shall be nationally uniform to the extent practicable. A State may adopt or continue in force any law, rule, regulation, order, or standard covering the subject matter of such State requirement until such time as the Secretary has adopted a rule, regulation,

order, or standard covering the subject matter of such State requirement. A State may adopt or continue in force an additional or more stringent law, rule, regulation, order, or standard relating to railroad safety when necessary to eliminate or reduce an essentially local safety hazard, and when not incompatible with any Federal law, rule, regulation, order, or standard, and when not creating an undue burden on interstate commerce.

Paragraph (a) of the regulation restates the effect of section 205. Paragraph (b) states that FRA does not intend to preempt provisions of State criminal law that impose sanctions for reckless conduct that leads to actual loss of life, injury or damage to property. While this part, taken with railroad industry rules and other Federal requirements, makes out a unified program for the civil regulation of alcohol and drug use in railroad operations, it is not an adequate substitute for criminal prosecution in a situation where *mens rea* and harm to the public safety or health correspond. This statement is intended to make clear the intent of FRA that the existence of Federal regulations not create a defense in a prosecution of a railroad employee whose conduct produces actual harm in violation of statutes derived from, or modeled upon, traditional common law crimes such as manslaughter.

FRA believes that the preemptive effect of this part will advance, rather than impede, the accomplishment of State objectives. Although several States do presently have statutes that address the job-related use of alcohol or drugs by railroad employees, those statutes have only rarely been enforced. The greatest capability for enforcement of anti-drinking and drugging rules lies with the railroads, who employ supervisory forces (and railroad police or special agents), and their employees. Both rail managers and employees have strong personal and economic incentives to avoid the loss of life and property that alcohol and drugs can cause. These rules will both strengthen the resolve of the railroads to address this problem and provide important new information and tools not previously available.

FRA has not received comments from any State requesting that FRA withhold Federal regulation in favor of State regulation. A representative of one State that recently enacted a statute on this subject testified at a public hearing in support of the proposals contained in the NPRM. The representative was requested to consult his counsel and advise FRA how best to reconcile the State and Federal approaches. FRA did not receive further information in response to that request.

Section 219.15 deals with the expression of alcohol concentrations in whole blood and with the conversion of breath readings to estimated blood levels. The approach taken is consistent with that used in enforcement of drunk driving laws on the highways.

Section 219.17 governs construction of the regulations. Paragraph (a) says that nothing in the part restricts the power of FRA to conduct investigations under section 208 of the Federal Railroad Safety Act of 1970. For example, requirements that voluntary referrals be handled on a confidential basis would not restrict FRA's access to records pertinent to an ongoing investigation under appropriate conditions.

Paragraph (b) says that the regulations may not be construed to create a private right of action on the part of any person for enforcement of the part or for damages arising from non-compliance with this part. The objective of these regulations is not to spawn litigation over matters collateral to safety. To the extent a railroad engages in a practice clearly prohibited by this part, FRA has adequate statutory sanctions, including assessment of civil penalties and issuance of orders directing compliance, to ensure that the regulations are respected.

This provision is included in Part 219 because of the extent to which it addresses employer/employee relationships. The fact that such a statement does not appear in other FRA regulations may not be read to indicate a contrary result.

Section 219.19 describes the content of the Field Manual that FRA will make available to the railroad industry.

1. Federal Prohibition on Alcohol and Drug Use

a. Summary of Proposed Rule (§ 219.103)

The proposed rule would have prohibited the use or possession of any drug, defined as a controlled substance, by any employee while the employee is assigned to perform service covered by the Hours of Service Act. An exception was provided for possession of an unopened container of an alcoholic beverage in the employee's personal motor vehicle.

The rule would have prohibited any employee from reporting for covered service or going or remaining on duty in covered service while under the influence of, or impaired by, alcohol or any controlled substance.

The proposed rule contained two conclusive presumptions. First, a BAC of .05 or above would have given rise to a presumption of impairment by alcohol.

An employee would have been presumed impaired by a controlled substance if the employee had a quantity of the drug in the employee's body fluids sufficient to affect the perception, mental processes or motor functions of an average person.

The proposed rule would also have established a standard 2100 to 1 ratio for comparing breath and blood alcohol levels.

b. Public Comment

The comments on the rules as a whole indicated that there is substantial support for an alcohol and drug prohibition and that the railroads are at least prepared to acquiesce in such a rule. However, positive comments directed specifically at this portion of the NPRM were limited. The proposed federal alcohol and drug prohibition elicited support from NARUC, one state department of transportation, the American Medical Association, and at least two railroads. Other commenters making express reference to this section either opposed the concept of a federal rule (notably UTU) or took exception to one or more specific provisions.

Minimum standards. The AAR and many of the railroads expressed concern that any Federal alcohol or drug standard could be construed as displacing and rendering unenforceable current Rule G formulations, either directly or by implication. For this reason, some of the commenters wanted FRA to refrain from regulation entirely. Others merely wanted explicit regulatory language recognizing the railroad's existing policies.

Use of alcohol or drugs during duty hours. The commenters appeared to be unanimous in the opinion that on-duty alcohol and drug use should be prohibited in any Federal rule addressing the subject matter (although some would withhold regulation in favor of other measures).

Use of alcohol and drugs prior to duty. One railroad urged that the rule prohibit use of alcohol by an employee "subject to duty." The commenter did not define this phrase. (See NPRM at 28-31; 49 FR 24266-24267.) A labor commenter, by contrast, complained that a Rule G formulation containing this phrase is used to prohibit alcohol use by employees except during vacation periods, implying that FRA should not be so strict.

In a related comment, the Washington Legal Foundation suggested a pre-duty abstinence period for "illegal" drugs. For alcohol, the Foundation would require 8 hours abstinence where there is at least 8 hours notice of the beginning of the assignment. A commuter railroad

advocated an 8 or 12-hour abstinence period.

BAC. The largest volume of comments addressed the blood alcohol concentration (BAC) issue. The railroads generally contended for a "no alcohol" rule, such that an employee would be required to report for duty without any trace of alcohol in that employee's system. They worried that adoption of any regulatory standard other than ".00" could signal a relaxation in the rule of conduct for employees. A university-based toxicologist said FRA should specify that "any forensically documentable BAC constitutes grounds for removal from service."

The AAR shared the concern of the railroads that the Federal rule could undermine the railroads' positions in arbitrations. The AAR emphasized that a relatively small amount of alcohol taken in conjunction with an antihistamine can produce a substantial impairment and expressed anxiety that the .05 proposal might become a "floor" for disciplinary purposes. Despite its fear that a BAC level could be misconstrued, AAR thought the concept of a conclusive presumption was sound and would "greatly enhance the enforcement programs conducted by the nation's railroads." AAR thought FRA should adopt an absolute prohibition at .03, though the railroads would continue to insist that employees not have any alcohol in their systems.

AAR emphasized that railroad duties "require the ability to concentrate on specific, repetitive tasks for long periods of time." AAR thought that any level should be set at the point there is a potential for a degradation of relevant mind or body functions.

NTSB noted that it would not want to see discipline based on a breath test of .02 and agreed that there is not yet any demonstration of impairment below that level. NTSB submitted a table of authorities that tended to support the existence of performance decrements at .03 percent or above.

Amtrak thought that if a quantitative standard were to be adopted it should be .03 percent. Amtrak urged that the "minimum standards" qualification be further strengthened to state that the Federal level could not be used as evidence more strict standards are not reasonable.

Two local BLE representatives concurred in an absolute .05 standard. At least one national union appeared to argue for adoption of .10 percent if any level were stated that might require discipline, on the ground that this level is widely accepted as a test of intoxication on the highway.

A railroad requested a clear statement that the proposed .05 percent presumption does not give any employee the prerogative to be under the influence of alcohol while on duty merely because his BAC is less than that level. RLEA and BRS, on the other hand, argued that any presumption at .05 or above should be rebuttable.

There was extensive discussion of the fact that any BAC measurement is merely a snapshot of a level that may be ascending or—more likely—descending. AAR thought some employees might be tempted to gamble that their BAC would fall below the absolute Federal level in the period between an accident and the time a test could be administered. A western railroad noted that an employee could be on duty with a BAC of .08 and yet drop below .05 prior to a test conducted 3 hours later. Another western railroad expressed similar concerns. The chief medical officer of a third western railroad noted the same problem and expressed the following view:

In my opinion, any presence of alcohol in an employee's body fluid is inconsistent with safe rail operations. The .05 percent BAC per se level of intoxication does not address the significant minority of persons who would be impaired to some degree by a blood alcohol level of less than .05.

Rule G offenses based on observations. The AAR expressed concern that the grant of testing authority might be viewed by some arbitrators as requiring direct evidence of BAC levels. AAR said that the regulation should state that railroads may take disciplinary action on the basis of observations, as is the case today.

Impairment. One local UTU commenter urged deletion of the prohibition on "impairment" by alcohol or drugs, believing that the term "under the influence" is sufficient and that adding the term impairment could provide a basis for harassment.

Possession. AAR would limit the ban on possession of drugs to controlled substances, even though it advocated a broader definition of the term "drug." The AAR and five railroads argued strongly against any exception to the alcohol possession prohibition for unopened containers in private automobiles on railroad property. Some of the commenters expressed concern that private automobiles are often used for railroad business. Others believed that they could be used to "stash" alcoholic beverages or drugs that might be used at some point during the duty tour.

Drugs. The definition of "drugs" was contained in § 218.101 of the proposed rules. A "drug" was defined to mean a controlled substance. Commenters generally supported use of the controlled substance list to identify prohibited drugs, but many advocated broader prohibitions. The AMA suggested FRA study whether further controls might be appropriate for antihistamines and other unspecified substances. A university toxicologist also suggested review of other candidate drugs by an expert panel. AAR and the railroads favored broad bans on mind-altering substances.

A major eastern railroad said that the controlled substances list is often two to three years behind with respect to new drugs in use by drug abusers. The commenter joined other railroads in urging the prohibition of "any mind-altering of function-altering substance including, but not limited to, a controlled substance."

A local BLE officer said that the regulation should be specific. BLE suggested adherence to FAA regulations on drug use, but did not point to portions of the regulations it intended that FRA copy. (§ 91.11 of Part 91, Title 14, Code of the Federal Regulations, provides that "No person may act as a crewmember of a civil aircraft . . . while using any drug that affects his faculties in any way contrary to safety.")

Prescription drugs. In the NPRM, the matter of prescription drugs was handled through the definition in § 218.101. An employee would have been permitted to use a controlled substance under a prescription issued by a medical practitioner if the private practitioner made a good faith judgement that use of the substance was consistent with safe performance of the employee's duties. AAR suggested that the operative language be moved to the substantive section and noted the potential for after-the-fact ratification of drug use by a personal physician. AAR and the railroads favored approval of some of all therapeutic uses by the railroads' own physicians. They noted that individual physicians may not be fully aware of the nature of the employee's job requirements or of the consequences that could flow from impairment. Amtrak suggested that the employee be required to notify the supervisor of any prescription drug use or, alternately, obtain chief medical officer approval for such use. An eastern railroad weighed in with a similar notification proposal. Amtrak and a system-level BLE officer suggested that certain prescribed drugs could be pre-approved for use (and/or listed as

impermissible). However, a local BLE representative expressed concern that the railroads might not permit legitimate therapeutic use of some drugs.

The AMA offered the following comment:

We believe that the provision in the proposed rule that allows covered employees who are using a prescription drug to continue to work if their physician makes a good faith judgement that use of the substance by the employee at the prescribed dosage level is consistent with the safe performance of the employee's duties is absolutely essential. This provision recognizes that many individuals' drug regimens are stabilized to the extent that they can safely perform railroad operations and that their drug use is under the supervision of a physician. Failure to include such a provision would have serious adverse consequences, if a covered employee who is properly complying with a prescribed regimen is penalized, or if the employee fails to comply with the prescribed drug regimens for fear of loss of employment.

Drug impairment presumption. The proposed rule would have deemed an employee to be in violation of the drug impairment standard "if the quantity of the drug in the employee's body fluids would be sufficient to affect the perception, mental processes or motor functions of an average person." This approach was criticized by the railroads, the RLEA and public witnesses, who viewed the provision as vague and unenforceable. The commenters cited the current state of pharmacological knowledge and the wide variances in the effects produced by particular drugs on different subjects (or even the same subject under varying conditions). Several commenters argued that the rule should forbid the presence of any detectable level of controlled substance in the employee's body fluids. At least three commenters appeared to suggest that even the employee's urine should be free of drugs or their metabolites. These commenters were proposing, in effect, that employees should be forbidden from using drugs off the job, as well as on the job.

By contrast, an eastern railroad said that the presumption of impairment should exist "if the quantity of the drug in the employee's body fluids would be sufficient to affect the perception, mental processes, or motor functions of the employee."

Some employee representatives appeared to indicate that off-the-job drug use was not relevant to safety. One labor commenter filed a paper by a physician engaged in research who sought to counter the contention of most researchers who have studied the disposition of marijuana in the body that the principal marijuana constituent ("THC") is stored in fatty tissue and

"leeches out" into the bloodstream. The commenter appeared to be concerned that the railroads would use the presence of residual THC as a basis for Rule G violations; and comments by some of the railroads appeared to suggest that they might, in fact, take that position.

NTSB said that, with respect to marijuana, "the determinant of use must be a reliable blood analysis for THC and its metabolites until non-intrusive means to detect the presence and time of use are developed." However, NTSB apparently did not mean to limit the proscription of the rule to proven on-the-job impairment. Indeed, NTSB stated that "the rules should be drafted to explicitly reject the social use of controlled substances, including marijuana, by those involved in railroad operations."

c. Final Rule Provision (Subpart B)

The time has come for the issuance of a clear Federal prohibition on the job-related use or possession of alcohol and other drugs by employees engaged in safety-sensitive functions. Such a regulation is necessary to provide a foundation for both public and private sector initiatives designed to control this problem. The public is entitled to know that the railroads and their employees are subject to firm and meaningful standards; and railroad employees deserve the protection that such standards can help to provide.

Importantly, a Federal rule of conduct will emphasize to employees the public safety implications of alcohol and drug use. It will improve Rule G compliance by reducing the perception that Rule G is "management's rule" and helping to convince co-workers that they have a stake in ensuring that everyone is fit to work.

There is always a danger, of course, that issuance of a Federal prohibition could be perceived to relax what is already a tough, if at least partially ambiguous, industry rule. FRA intends no such relaxation. The regulatory text can itself provide reassurance concerning the continuing viability of Rule G in its various formulations, at the same time strengthening the application of that rule by setting minimum standards for its implementation. FRA intends to communicate this message as directly as possible through regional public conferences accompanying the issuance of this final rule and through the network of FRA and participating state inspectors who visit the railroad properties every day, as well as through this preamble.

The nominal concern expressed by the railroads is that they will lose the ability to fire the employee who can only be proven to have "beer on his breath" upon reporting for work. FRA believes that such terminations have been infrequent, and that the current system for Rule G enforcement, together with the need to move freight and passengers, is more likely to lead many supervisors to ignore signs of possible alcohol consumption that do not rise to the level of obvious drunkenness rather than to face the disruptions and inconveniences associated with charging the apparently marginal violator under Rule G. In any event, nothing in this rule will prevent the railroads from taking disciplinary action on the basis of the same information commonly utilized today.

Therefore, *Subpart B* of the new Part 219 is devoted to the prohibition of alcohol and drug use, including the problem of therapeutic drug use.

Section 219.101 ("Alcohol and drug use prohibited") contains the basic prohibitory language. *Paragraph (a)(1)* prohibits on-the-job use of alcohol or controlled substances by covered employees. It also prohibits any employee from reporting for covered service or going or remaining on duty in covered service under any one of three conditions: (1) while the employee is under the influence of, or impaired by, alcohol; (2) while the employee has a BAC of .04 or above; or (3) while the employee is under the influence of or impaired by any controlled substance.

The ban on on-the-job use refers to any such use while the employee is assigned to perform covered service. For instance, an employee who accepts a call to perform yard service and reports at the appointed time becomes subject to the prohibition on reporting, even though the employee may not yet have engaged in the movement of rolling stock. "Use" is intended to have its common sense meaning. For instance, an employee may not ingest an alcoholic beverage, inject a controlled substance, or take a controlled substance in pill form. The problem of lingering effects of alcohol and drugs taken into the body prior to reporting for work is addressed in paragraph (a)(2).

The ban on possession is intended to reduce those situations in which employees may be tempted to indulge in alcohol or drug use while on the job. FRA believes that the railroads will continue to apply their current policies with respect to possession of alcohol and drugs. However, it is important to state as a minimum Federal policy that covered employees may not have these substances in their possession while

they are on duty. The term "possession" is defined in § 219.5.

Paragraph (a)(2) deals with the present condition of the employee, rather than the act of taking the substance into the body. It is principally directed at the problem of pre-duty use, but applies equally to the condition of an employee who has used a substance on the job without being detected in the act.

Paragraphs (a)(2)(i) and (2)(iii) deal with the employee who is under the influence of, or impaired by, alcohol or a controlled substance. FRA is aware that these terms may have differing meanings from one regulatory context to another. FRA intends them to have their common meanings. By "under the influence of" FRA intends to refer to noticeable effects of alcohol or a drug that cause the employee to behave or appear in a way characteristic of the effects of the substance and thus suggest that the employee is not fit to undertake safety-sensitive functions. For instance, an employee who is under the influence of alcohol or another central nervous system depressant may give evidence through slurred speech ("heavy tongue") or unsteady gait. An employee who is under the acute influence of a central nervous system stimulant may appear extremely nervous or unusually talkative. Obviously, for an employee to be found "under the influence" it will be necessary to form a judgment that the observed appearance or behavior is related to alcohol or drug use, as opposed to other causes. However, these are the kinds of determinations required of the railroads under their existing rules.

The concept of "impairment" relates to the employee's ability to perform his functions properly. For instance, an employee with a significant level of alcohol in his system might be capable, as a result of practice or selective tolerance, to conceal the conventional signs that he is "under the influence." However, if the employee fails to perform an assigned task in a proper manner, and it can be established that that failure was associated with alcohol consumption, the employee would be shown to be "impaired."

These categories are not mutually exclusive with respect to their practical effect. For instance, an employee might have alcohol on his breath and "glassy" eyes without other signs of being intoxicated (or "under the influence"). However, if the employee also failed to perform his duties correctly the supervisor might be warranted in concluding that the employee was in violation of the rule. The testing

authority conferred by Subpart D can assist in resolving marginal cases.

Paragraph (a)(2)(ii) sets a *per se* level of alcohol that is absolutely prohibited. FRA has decided to sue the *per se* prohibition in lieu of a conclusive presumption because the outright prohibition is simpler and more easily understood by the lay persons who will apply it.

FRA is persuaded that the available scientific data, together with reasonable inferences therefrom, firmly supports a *per se* prohibition of any blood alcohol concentration of .04 percent or greater. This conclusion rests on the following considerations:

1. The standard will be civil in nature. Violation of the standard will not result in any criminal prosecution or loss of liberty. Rather, the standard is designed to promote the safety of railroad operations.

2. Persons subject to this standard will be employees of transportation companies engaged in interstate commerce and can reasonably be expected to maintain a high level of fitness to perform their jobs with a minimum of risk to other employees and the public. Indeed, the rule imposed by employers in the industry for over a century has been one of "no alcohol," and it may be expected that employers will continue to enforce this high standard. To the extent available information permits, the Federal standard should be reasonably consistent with the existing private sector rule, so as not to undo the positive effects of the latter.

3. Considerable data from experimental or clinical settings supports the proposition that low levels of alcohol can and regularly do have detrimental effects on human performance, including divided attention skills and information processing, in the motivated subject. Although detrimental effects are reported at lower levels, and even after alcohol is eliminated from the body (the so-called "hangover effect"), the consensus of scientific and professional opinion appears to be that material detrimental effects on human performance begin at least in the range of .04 percent. See, e.g., American Medical Association, *Alcohol and the Impaired Driver* at 58-59 and research summarized at 36-57 (1970, reprinted by National Safety Council 1976); Bjerver, B.M., and Goldberg, L., "Effect of Alcohol Ingestion on Driving Ability," *Quarterly Journal of Alcohol Studies*, 11:1-30, 1950; Billings, C.E., et al., "Effects of Alcohol Ingestion on Driving Ability," *Aerospace Medicine*, 44:379-382, 1973; Laurell, Hans, "Effects of

Small Doses of Alcohol on Driver Performance in Emergency Traffic Situations," *Accident Analysis and Prevention*, 9:191-201, 1977; *Alcohol and Highway Safety 1984* at 16-23 (National Highway Traffic Safety Administration); *Alcohol and Highway Safety* at 15-19 (National Highway Traffic Safety Administration 1978). Although low doses of alcohol may not appreciably affect simple reaction time in most subjects, such doses may appreciably affect choice reaction time (response in divided attention situations of the kind experienced by operators of transportation vehicles). See, e.g., Huntley, M.S., Jr., "Effects of Alcohol and Fixation Task Difficulty on Choice Reaction Time to Extrafoveal Stimulation," *Quarterly Journal of Studies on Alcohol*, 34(1):89-103, 1973. Indeed, some studies suggest that significant performance decrements may be measurable at BAC's below .04. See, e.g., Moskowitz, H., "Skills Performance at Low Blood Alcohol Concentrations" (Southern California Research Institute, May 1984; unpublished); Flanagan, N.G., "The Effects of Low Doses of Alcohol on Driving Performance," *Medical Science Law*, 23(3):203-209, 1983.

4. Although railroad-specific studies are not available, railroad employees perform tasks, similar to many of those used in alcohol studies, requiring that they be free from the known physiological effects of even low levels of alcohol.

5. Railroad managers and employee representatives alike agree with the objective of preventing the use of alcohol in railroad operations and concur in the view that the use of any quantity of alcohol while on duty is inconsistent with the high level of safety toward which they strive in other areas. This suggests an accumulated experiential judgment on the part of the railroad industry that alcohol is detrimental to safe functioning in railroad operations.

6. FRA's review of the documented alcohol-related accidents over the past decade indicates that a significant portion probably involved fatigue, inattention, drowsiness, or a sleep state on the part of the crew members at fault. In each case, it appears likely that alcohol caused or exacerbated these conditions. This indicates that one of the primary dangers of alcohol use in the railroad environment is a generalized depressant effect on the central nervous system of fatigued or unmotivated employees, who may be functioning in an environment where there may be significant intervals between stimuli. The classic case is the operation of a

train during the late night or early morning hours over familiar territory with few or no signals and with relatively long intervals between public grade crossings, where there is little need for frequent throttle adjustments or brake applications. Conditions in the locomotive cab or caboose may contribute to this syndrome (harmonic rock, steady background noise, lack of interior illumination during hours of darkness), a fact attested to by employees participating in this rulemaking and recent accident investigations. While the contribution of alcohol to the syndrome is not readily subject to verification under experimental conditions, it is nevertheless extremely probable in view of FRA's knowledge of working conditions in the railroad industry, the accident data, and the known effects of alcohol on the human body. Further, it is consistent with data developed in other contexts. See e.g., Ryder, J.M., et al., *Effects of Fatigue and Alcohol on Highway Safety*, Report No. DOT-HS-805-854 (National Highway Traffic Safety Administration 1981) (hereafter "Ryder").

Accident data reveal that alcohol intoxication substantially increases—by more than five times—the probability that falling asleep at the wheel will be the direct cause of a motor vehicle accident. Treat, J.R., et al., *Tri-level Study on the Causes of Traffic Accidents*, Rep. No. DOT-HS-805-085 at 103 (National Highway Traffic Safety Administration 1979). Research concerning the effects of alcohol indicates that these generalized effects can occur at moderate blood alcohol levels. Erwin, C.W., et al., "Alcohol-Induced Drowsiness and Vigilance Performance," *Journal of Studies on Alcohol*, 39(3):505-516, 1978 (short duration study shows detection performance inversely related to BAC, with material difference, in view of authors, only at high dose; but percentage of eyelid closure time rose materially even at low dose, (.03)). Indeed, although some studies have suggested that very small doses of alcohol may temporarily relieve stress effects associated with fatigue, it is likely that ingestion of moderate doses (in the range of .04 to .06) actually contributes to fatigue and drowsiness in the post-absorptive stage. See, e.g., Landauer, Ali A., and Howat, Peter, "Low and Moderate Alcohol Doses, Psychomotor Performance and Perceived Drowsiness," *Ergonomics*, 26(7):647-657, 1983 (subjects receiving, *inter alia*, .05 percent peak dose report feeling drowsy for up to 3 hours (in post-

absorptive stage)); Ryder at 72 (indicating probability that fatigue, diurnal pattern, and alcohol may interact to enhance impairment during night-time hours). Thus, a railroad employee who comes on duty, particularly for an evening or early morning shift, after having consumed several drinks, very likely poses a higher safety risk with respect to attention to the task at hand, even if the employee's BAC is declining through the .04 or .05 range. This problem may be much more serious than suggested by laboratory studies, since the employees who use alcohol before reporting for duty may lack motivation; and the work environment may not include the same stimuli (including awakening the dozing subject in one study) found in the laboratory context.

7. The choice of *per se* level for a civil regulatory program requires consideration of the problem that employees may seek to function at the margins of its limits, despite the advice of FRA, medical and other experts that any alcohol is detrimental and despite stricter standards promulgated by employers. But precise estimation of one's own BAC is difficult, if not impossible. Even in carefully controlled laboratory experiments, attempts to attain predetermined BAC's by administering doses tailored to body weights of the subjects may result in "overshooting" the target level. In actual practice, employees may not even know the alcohol content of the beverages that they have consumed; and the tendency of social drinking to extend to "one more round" is appreciated by most adults. Therefore, the civil standard should contemplate that employees may underestimate the effects of alcohol (or even the number of drinks consumed) and sets the absolute ceiling for consumption accordingly.

8. Some accident data in the highway mode indicates an increasing risk of fatal accidents beginning at .04 percent (although a sharp rise in risk is not encountered until the .08 level). *Alcohol and Highway Safety* at 16 (National Highway Traffic Safety Administration 1978).

9. Blood alcohol testing may be done in the absorption phase, as well as in the elimination phase. For instance, an employee reporting for duty with a BAC of .04 might very well have a higher BAC within the next hour, depending on the amount of alcoholic beverage consumed and the recency of the last consumption prior to reporting. Decisions as to whether to relieve an employee and call another crew member must be made promptly; and if they cannot be made

promptly, there may be an unintended incentive to ignore the impediment to dispatching the train.

10. Unlike the Federal Highway Administration and the Federal Aviation Administration, FRA has not adopted a pre-duty abstinence period for alcohol. A significant pre-duty abstinence period such as 8 hours (the rule for aviation) tends to limit actual BAC levels, for all but the heaviest consumption, to very low ranges (assuming compliance with the requirement of abstinence). Further, such a period tends to ensure that persons in safety-sensitive positions who do have alcohol in their systems will be in the elimination (post-absorptive) phase, thereby limiting the problem described immediately above and also avoids the rather more pronounced subjective effects of alcohol that may be more closely associated with the absorptive phase.

11. Many BAC measurements in the railroad context will necessarily be conducted one or more hours after the event that gave rise to the need for the test. Alcohol is eliminated from the blood at a rate of approximately .015 percent per hour (on average), but estimation of prior blood alcohol levels is difficult because of individual variations. Again, the *per se* level established by regulations should be one which will promote extreme conservatism in the consumption of alcohol by those employees who are not inhibited from such consumption by the more strict "no alcohol" policies of their employers.

Many of the considerations listed above may also be cited for the proposition that the *per se* level should be set lower—even that FRA should adopt a "no alcohol" rule. However, FRA is persuaded that a stricter Federal standard would not be appropriate. Under the Federal Railroad Safety Act, direct enforcement actions can be brought only against the railroad (absent creation of an elaborate licensing or disqualification program). *Certainly each railroad should be encouraged to promote an alcohol-free workplace.* However, the minimum regulatory standard should take into account the difficulty of that task, particularly with respect to detection of alcohol impairment at very low blood alcohol levels. Further, there is some logic in the position that the railroads' supervisory and detection programs should be concentrated not so much on the employee with a very low blood alcohol level as on the employee with a BAC in the range for which safety risks are better documented. For instance, it may be less useful to check the breath of all

employees reporting for work than to make regular efficiency tests that measure actual job performance. It may be the case that there exists for most individuals a BAC (perhaps below .02) that is effectively *de minimis* from the point of view of safe job functioning—at least when viewed against the background of other performance-related factors such as illness, variations in effective rest prior to reporting for duty, and subject-to-subject variations in mental acuity, judgment and general physical fitness. (This assumes that the BAC under .02 is the peak level achieved.)

The risk of an alcohol-related accident likely increases as BAC increases, whether one makes reference to highway, rail or other data. Currently available accident data does not establish increased risk of an accident below the .04 level.

FRA has chosen a *per se* level identical to that recently adopted for flight crews by the Federal Aviation Administration (50 FR 15376; April 17, 1985). Although FRA has been aware of FAA's consideration of this problem, FRA has reached its conclusions independently. It is inevitable that the two actions will be compared. FRA recognizes that the level set by FAA is, in part, informed by the often very complex divided attention tasks undertaken by pilots and other flight crew members, as well as the reduced oxygen available in cabins pressurized to levels well above 5,000 feet. However, the considerations discussed above, such as the absence of pre-duty abstinence requirements and the record of alcohol apparently contributing to sleepiness or inattention, clearly indicate the need to set the *per se* level at .04 percent.

FRA has considered the research cited by the NTSB and the testimony of railroad witnesses in support of a lower *per se* level in relation to the choice of the .04 percent standard. FRA believes that the research supporting material performance decrements below .04 percent is not sufficiently persuasive in relation to actual risks on the railroads to support a lower *per se* level at this time. Indeed, both NTSB and AAR settled upon a recommended .03 percent level, only .01 percent less than the standard adopted. However, it is undoubtedly the case that some individuals are materially affected at lower levels, particularly where alcohol is taken in combination with other drugs (such as antihistamines, marijuana or depressants). The *per se* level in no way excuses the conduct of an employee who reports to work so affected.

It is appropriate to stress three points in conclusion:

First, the .04 percent is not a threshold below which corrective action is not authorized; it is a floor at or above which corrective action is mandatory.

Second, the fact that an employee might test just below .04 percent on a breath or other test does not necessarily mean that the employee could not be found in violation of the Federal *per se* standard. For instance, an employee with a BAC of .03 percent after the expiration of four hours on duty could easily be demonstrated to have had a BAC above .04 percent at the time the employee reported for duty (or to have consumed alcohol on duty, itself prohibited).

Third, the fact that a *per se* BAC is included in the regulation in no way restricts the railroad's ability to proceed with discipline under its own rules (or the Federal rule) solely on the basis of observations by a supervisor or other evidence traditionally accepted for this purpose.

Paragraph (b) defines "controlled substance" to have the meaning assigned by 21 U.S.C. 802. FRA has elected to state the drug prohibition as a ban on use of controlled substances because, as a class, they are mind and function-altering drugs that can impair the faculties of railroad employees. Further, controlled substances are available by only three methods: (1) illicitly, (2) by prescription or physician distribution, or (3) through controlled and documented sale over the counter. Thus, the very means of acquisition will tend to put even the uninformed employee on notice concerning their potential properties. Finally, controlled substances constitute the great bulk of drugs of abuse that might be used for non-therapeutic purposes.

The commenters overwhelmingly approved this definition, although many would have made the prohibition broader. FRA recognizes that there is some merit in the argument for a broader definition. However, the commenters have not persuaded FRA that the definition proposed is so underinclusive as to outweigh the benefit of referring to an established list of drugs that can provide concrete notice to employees of the conduct proscribed.

There appears to be little support for inclusion of specific additional drugs. The AMA's suggestion that antihistamines should be studied for inclusion is illustrative of the complexity of the problem. "Antihistamine" is a term referring to numerous chemically heterogeneous drugs that share certain

pharmacological characteristics. However, they are also dissimilar in many respects. If the AMA and Department of Transportation are unable to say with certainty which of these substances, if any, should be absolutely proscribed from use by the employee engaged in safety-sensitive functions, it makes little sense to employ a broad definition that leaves the employee to guess whether the substance should be viewed as forbidden. The counter-argument here is that the user of an antihistamine preparation, for instance, is best able to judge the effects of the drug, at least where the drug produces noticeable effects such as drowsiness or unsteadiness. Further, the buyer of a street drug may not know what he or she is getting but certainly knows that the intended effect may not be consistent with clear-headed discharge of his or her responsibilities as a railroad employee. FRA has chosen the conservative course for the present, recognizing that the railroads may, with good reason, elect to retain or institute broader prohibitions.

FRA does expect that the railroads will revise their rules to the extent necessary to prohibit, at a minimum, job-related use of all controlled substances. The current standard Rule G formulation refers only to "narcotics." While it is true that some railroads employing that formulation have supplementary rules and policies going to other controlled substances, and while some arbitrators may have been persuaded that the term "narcotics" is intended to be read as reaching substances other than those noted principally for the analgesic effect (largely opium-based drugs), greater clarity and specificity is to be recommended. Stimulants, hallucinogens, depressants, and marijuana (by far the most prevalent drug of abuse) are not "narcotics" in any legal or pharmacological sense—let alone in the parlance of the circles where illicit drugs are purchased.

FRA did not note any active assertion by the commenters of a reservation with use of the controlled substance list. In other transportation contexts, it has sometimes been argued that acute use of central nervous system stimulants (such as amphetamines, methamphetamines or cocaine) may not result in measurable performance decrements in controlled laboratory settings using motivated subjects. Indeed, under highly controlled conditions, performance may be temporarily enhanced. FRA takes this lack of comment as illustrative of the sophistication of the railroad industry,

employees and management alike. While stimulants (including the nonregulated stimulant, caffeine) may occasionally be used to combat the effects of fatigue or lack of sleep, reliance on stimulants in a work environment is not advised (particularly those stimulants with a high dependency potential). The availability of stimulants may actually encourage poor rest habits and promote risk-taking. Where intake is not regulated carefully, the elimination of recent stimulant doses may result in precipitous and deep sleep or other serious after effects. Excessive intake can result in loss of coordination or even trigger hallucinations. Evidence is accumulating that episodic abuse of cocaine may be characterized by absorption in the drug experience, overconfidence, and consequent errors in job performance. FRA has no reservation concerning the prohibition of stimulants or any other drug group represented on the controlled substances list.

Paragraph (c) states that this section does not restrict a railroad from imposing an absolute prohibition on the presence of alcohol or any drug in the body fluids of persons in its employ, whether in furtherance of the purpose of Part 219 or for other purposes (e.g., to promote productivity, protect the business reputation of the company, prevent violations of criminal law on railroad property, etc.). FRA believes that this language is fully responsive to the concerns of the AAR and some railroads that Federal rules may be read to replace Rule G or render it unenforceable.

Paragraph (d) provides that § 219.101 may not be construed to prohibit the presence of an unopened container of an alcoholic beverage in a private motor vehicle that is not used in the business of the railroad. That is, under the final rule such presence is not made a Federal concern. But the paragraph also says that the section may not be construed to restrict a railroad from establishing such a prohibition.

FRA has concluded that, although the railroads are free to prohibit the presence of alcoholic beverages in a vehicle parked on company property, it does not follow that the railroads should be subject to a general Federal obligation to prevent such possession, except where the vehicle is used for company business.

Note on abstinence period. Throughout this rulemaking FRA has considered proposals by various parties that FRA impose a pre-duty abstinence period of a set duration or that barred alcohol or drug use by an employee "subject to duty." FRA has previously

explained in detail why an abstinence period requirement has not been adopted. NPRM at 58-62; 49 FR 24272-24273.

FRA views the proposal of one commenter for an abstinence period of eight (8) hours applying only to illicit substances to be unacceptable for the reasons already articulated, particularly lack of enforceability. There are two further objections. First, it would be unfortunate if such a provision were to be construed to mean that use of illicit substances by an employee in safety-sensitive functions is acceptable (an implication obviously not intended by the commenter). Second, the arbitrary 8-hour limitation is less than the period during which at least some illicit drugs produce acute effects.

Section 219.103 ("Prescribed drugs") addresses the use of drugs prescribed or otherwise authorized for use by a medical practitioner. Paragraph (a) follows the policy of the proposed rule in permitting the employee to rely on the judgment of the personal physician (or dentist, in an appropriate case) if the personal physician has been made aware of the nature of the employee's duties.

FRA agrees that it is desirable for the railroad medical officer to evaluate the safety of prescription, over-the-counter and patent drug use, since the private physician may not be effectively acquainted with the full range of facts relevant to the employee's duties. Further, in some cases a given employee may receive medication from or through more than one practitioner. However, FRA believes that few railroads maintain the kind of staffing and information systems needed to provide timely and expert guidance to employees on the 7-day, 24-hour basis required by railroad operations. Imposing on employees the duty to obtain clearance from a carrier medical officer who cannot be reached prior to the time set for reporting for duty would merely serve to shift the blame to the employee when an accident or injury occurs. The railroads that appeared before FRA did not appear prepared to accept the responsibility of providing such guidance except in selected cases.

Paragraph (b) recognizes the legitimate interest of the railroad company in reviewing the therapeutic use of drugs by its employees. A railroad may elect to require its employees to notify a designated representative (who is readily accessible) of therapeutic drug use prior to the start of the duty tour. If the employee is required to obtain approval for therapeutic drug use prior to

reporting for duty, the railroad should provide adequate means for obtaining such approval in a timely manner.

In no case should notification or approval systems be established that present unreasonable obstacles with respect to employee compliance, since such arrangements will undermine employee confidence in the fairness of the railroad's alcohol and drug policy.

2. Post-Accident Toxicological Testing

a. Summary of Proposed Rule (sec. 218.105)

The proposed rule would have required that post-accident toxicological testing be conducted after approximately 550 train accidents and incidents each year. Testing would have been required after any train accident involving a fatality, reportable injury, damage to railroad property of \$150,000 or more, or release of hazardous materials. Testing would also have been required after a train incident involving a fatality or loss of arm, leg or eye. Rail/highway grade crossing accidents and trespasser injuries would have been excluded from the class of accidents covered.

Employees tested would have included train or yard crews and other employees directly involved in the event who are subject to the coverage of the Hours of Service Act. The railroad was required to take all practical steps to obtain blood and urine samples from employees, which were to be collected at a medical facility. Samples were to be shipped to a laboratory designated by FRA. The railroad was to notify FRA if a medical facility declined to take samples from an unconscious subject or if the custodian of the remains of an employee declined to cooperate in obtaining samples for testing.

The proposed rule would have required that all covered employees execute consent forms affirming their consent to post-accident testing. The forms were to be made available where injured or deceased employees might be unable to affirm consent after an accident.

Any employee who refused to provide a blood or urine sample would have been subject to a standard period of disqualification of six (6) months. The railroad would have been required to provide a hearing soon after removing the employee from covered service.

The proposal also included a requirement that the railroad make a short narrative report in any case where samples were not obtained as required by the regulation.

At the technical conference on August 1, 1984, FRA presented the relatively

simple concepts under consideration for packaging, shipping, and centrally analyzing samples obtained in the post-accident testing program, including the use of a shipping kit ("tox box") similar to the kit used for many years by the Federal Aviation Administration and NTSB in aviation accident investigations. These kits would be maintained at major terminals on the railroads (or in selected company vehicles) and taken to the medical facility to which employees are transported. Samples would be placed in the kits and shipped by air freight to FRA's designated laboratory, the Civil Aeromedical Institute (CAMI) toxicology laboratory in Oklahoma City, Oklahoma, where tests would be conducted.

b. Public Comment

Post-accident testing drew outright or qualified support from NARUC, the New York Department of Transportation, AMA, ten railroads and one local labor officer. RLEA and UTU indicated they did not oppose the provision. UTU found it a constructive proposal, so long as employees and their representatives have an opportunity to obtain the results. RLEA emphasized the need for frequent calibration of testing equipment. BLE opposed the requirement of consent as a condition of employment.

Three railroads and some local union officers opposed imposition of the mandate to test. One of these railroads thought the burden of testing was not justified by the need to develop statistics. A second thought testing should be at the option of the railroad (i.e., should not be mandatory).

Two railroads advocated an exception for testing in any situation where it is known immediately that the employees are faultless as to cause or severity. Another railroad would test only where it is clear that there was human failure.

A local UTU officer thought the proposal would result in harassment, paperwork, and "unjustified conclusions of 'man failure'." The officer believed post-accident testing would also lessen morale. Another UTU local officer believed testing under the proposal would be frequent, but unproductive.

Deterrence. One of several grounds upon which FRA advanced the post-accident testing requirement was its potential for deterrence of job-related alcohol and drug use. Several commenters questioned that premise, believing that post-accident testing would be useful only for generating statistics. A consultant in the drug field believed that post-accident testing could not serve as an effective detection or

deterrence tool because of the relatively small number of events captured. At the technical conference on post-accident testing, a railroad EAP director argued that post-accident testing would never deter alcohol and drug abusers; but another participant said that "abusers and users" might have different responses. A northeast railroad thought post-accident testing "may add to the desired deterrent effect." AAR and a commuter railroad thought it would be "only marginally beneficial as a deterrent and detection mechanism."

In general, the commenters did not disagree with that portion of FRA's rationale relating to the need for more accurate and complete data on individual accidents. (See NPRM at 145-148; 49 FR 24289.)

Events covered. Several railroad commenters, including AAR, noted that the proposed rule attempted to use severity indices to select accidents and incidents for inclusion in the testing requirement. AAR said that severity is an "indiscriminate" measure of whether testing is indicated. Several witnesses urged that tests should not be required where it is "known" that there was no human failure. Railroad witnesses contended that many of the accidents identified for testing in the NPRM are equipment and track-caused derailments with respect to which human failure can be effectively excluded very soon after the accident. Testing in these cases was said to be unfair to employees, detrimental to the smooth flow of commerce, and an unnecessary burden on the railroads.

A commuter railroad thought that testing after a train incident would be warranted in the case of an employee injury but not where the injury was to a passenger alighting from the train.

Thresholds. Two of the testing thresholds came under particularly pointed attack: the substantial property damage and injury thresholds. AAR said that the \$150,000 threshold could be triggered by damage to three box cars or one locomotive. This would result in testing after many "fender-benders." A railroad said the 80% of its accidents over \$150,000 do not involve human factors. Although believing that "severity is an indiscriminate measure," AAR and several railroads indicated that they would settle for a threshold of \$500,000. Some suggested that the higher threshold be indexed for inflation. By contrast, as discussed above, GAO's audit report on alcohol and drug abuse strongly urged testing after all reportable train accidents.

Similarly, AAR noted that the injury threshold could be triggered by injuries

such as a splinter under a fingernail. AAR suggested that injury be the trigger where it "requires emergency medical treatment at an emergency medical facility" [emphasis supplied]. AAR indicated that this approach would excuse testing in the great majority of injury-causing train accidents for which the only injuries are bruises, sprains and strains. A railroad suggested that testing should be required only where it is necessary to hospitalize the employee for treatment.

There were some complaints that determining the extent of damage and other triggers on the scene of an accident would be difficult. Some railroads, in particular, feared being penalized for failing to test in a case where damages turned out to be higher than originally known. The converse was also raised, with the implication that FRA should protect the railroads from good faith "overtesting."

Grade crossings. NTSB urged that the rule require tests of (at least) front end crew members after fatal rail/highway grade crossing accidents, since overspeed operation, failure to use whistles, and the like could contribute to such accidents. Two other commenters agreed. BLE opposed testing after grade crossing accidents, arguing that such testing would exacerbate the trauma experienced by engineers after these accidents without producing any concrete benefits. But a local BLE officer thought there should be testing where there is a fatality to a train crew member or motorist.

One railroad thought that testing should be required after grade crossing accidents only where there is reasonable suspicion that an employee is impaired.

One commenter thought the exclusion of rail/highway grade crossing accidents from the proposed program of testing was based on a desire to shield the railroads from liability. This commenter and another commenter who was critical of the rulemaking as a whole argued in favor of inclusion of grade crossing accidents but without any expressed rationale.

Employees covered. Some commenters thought persons other than Hours of Service employees should be tested after accidents. NTSB would test "all employees directly involved in an accident," including any supervisor riding in a locomotive cab. BLE and some local union representatives urged that carrier officers, maintenance-of-way employees and others be tested. BLE cited the example of a maintenance-of-way gang placing an approach sign "on top" of a stop sign, thereby making it impossible for the

train crew to slow before the work area. A UTU local representative cited yardmasters, road foremen of engines and others as candidates for testing. A consultant with experience in establishing industrial drug abuse programs suggested that tests should be administered only after human factor accidents; and only those employees known to have been involved in the cause would be tested.

A freight railroad thought that members of the public who are involved in an accident should also be required to submit to testing. A second freight railroad thought motorists involved in grade crossing accidents should be required to be tested.

Joint operations. A railroad suggested that the host railroad should be responsible for getting the samples in a joint operation accident/incident. AAR thought the railroad required to report the accident should be responsible.

Logistics. Several railroads stressed the logistical difficulties associated with post-accident testing. Amtrak objected to holding loaded passenger trains during testing. AAR thought the costs of the program would be "substantial," but did not directly address FRA's economic evaluation. Western railroads, in particular, cited the long distances over which they operate and stressed the difficulty and time delay associated with transporting crews to locations where samples can be taken. One of those railroads, however, said it was prepared to proceed despite the problems, noting that the program can be modified in light of experience gained through its implementation.

Amtrak and the AAR suggested that the rule should preserve the option to use mobile medical units in which samples could be collected.

The AAR and other commenters thought FRA should shoulder a major part of the responsibility of notifying medical facilities of the requirements of the rules and dealing with those facilities in cases where employees have sustained fatal injuries or are unconscious and thereby unable to affirm consent to testing. It was suggested that FRA establish an 800 number to assure 24-hour contact in these situations and where medical facilities decline to cooperate even in the face of contemporaneous consent.

At the technical conference, a pathologist argued for a non-centralized post-accident system, citing potential chain of custody problems and difficulty with transportation of laboratory personnel for litigation. Another pathologist urged that FRA designate centers at which samples would be collected, so that collection and chain of

custody techniques would be of uniform quality and in order to avoid the non-cooperation problems of dealing with a random selection of hospital emergency rooms. An EAP director noted that physicians in small communities may be particularly reluctant to take samples from subjects whom they treat on a regular basis.

Several other parties also noted the difficulty of enlisting the cooperation of medical facilities in obtaining samples, even when employees are alert and willing to affirm their consent to provide samples. The railroads urged an active role for FRA in acquainting the medical care community with the requirements of the rules.

Integrity of system. Labor witnesses stressed the importance of safeguards to ensure reliable results and avoid carrier tampering with samples. There was objection to any system that might permit carrier officers to handle the samples after they were taken.

Consent. The consent form proposed to facilitate post-accident testing elicited significant objections. The UTU thought the form was unnecessary and might provoke assistance. BLE thought the consent requirement itself would infringe on the rights of employees who have no history of alcohol or drug-related problems.

The railroads thought it would be very difficult to produce the form at medical facilities across their systems. However, one railroad suggested that it could be photocopied and reduced to a wallet card that the employee could be required to carry.

The American Hospital Association (AHA) thought the form would not be effective in persuading hospitals to draw samples since they might face potential liability in subsequent litigation. AHA advocated forming a "panel of medical and legal experts to assess the minimize the liability of medical facilities and personnel." Some of the railroads also predicted that medical facilities would not honor the prescribed consent form or said that it was "unnecessary."

Representatives of a large urban medical center said that any consent would have to be in writing and would have to include authorization to release the sample or test results, as appropriate. The commenter suggested annual re-execution to avoid the appearance of staleness. The same commenter noted that reports of post-accident tests might include mention of drugs administered after an accident. The representative noted that this could result in unnecessary suspicion by the employer unless the consent to the test included release of information of

therapeutic drugs administered during treatment of injuries incurred in the accident or incident.

Objections were also raised to § 218.105(g), which would have prohibited assignment of an employee in covered service where the employee refused to sign the consent form. Commenters were confused by the phraseology, believing that the provision preserved a right for an employee to return to covered service after some months during which the employee had refused to execute the form.

Timely reports. AAR and several railroads asked that FRA provide results of post-accident toxicological analysis within 72 hours of the accident. They cited numerous agreement provisions that require them to charge employees with rule violations within very short periods after the events in question. One railroad wanted to be able to retain sufficient samples to conduct its own analysis, permitting the railroad to bring charges (or close out its investigation) promptly.

A local BLE organization urged that a copy of the toxicology report be sent to the union local chairman and suggested that the employee's copy could be provided at the employee's work location. A railroad suggested that the appropriate division superintendent and the employee should be notified of the results. A public commenter urged that toxicology results not be released until they are in final form and all relevant analysis has been undertaken.

Disqualification. The 6-month disqualification requirement for employees refusing tests elicited heated responses. Several railroads wanted FRA to mandate a sanction of dismissal or indefinite disqualification. Others thought discipline could be left to the railroad. In testimony at the Washington hearing, NTSB said a 1-year disqualification was more realistic, since it more closely approaches the sanction likely to be applied by the railroad in the event of a positive test. In its filing for the docket, NTSB indicated that the sanction should be the same as for a Rule G violation, i.e., dismissal from employment.

AAR and three railroads suggested deletion of the hearing requirement, since procedures for disciplinary hearings are already in place on the railroads. One railroad would permit the carrier investigation to be merged with the hearing required by regulation. BLE thought that the hearing should consider the employee's basis for refusing to provide samples, as well as the fact of refusal. One railroad said retention of the hearing requirement would require FRA to address whether appeals from

railroad decisions are to be handled under section 3 of the Railway Labor Act or through the Federal courts. (Comments on legal issues attendant to disqualification and hearing are discussed below.)

Miscellaneous comments. AAR asked that FRA determine the status of time used in travel to the medical facility, taking the samples, and returning employees to their homes or reporting point. AAR contends such time would not be "on-duty time" under the Act. The AHA said the provision should emphasize non-interference in emergency medical treatment and should specify the party responsible for paying medical facility charges.

c. Final Rule (Subpart C)

FRA believes the concept of post-accident toxicological testing is critical to a national program intended to prevent alcohol and drug-related accidents and injuries on the railroads. There are at least five independent, if related, bases for mandating post-accident testing.

First, post-accident testing is needed to guide FRA enforcement efforts under these new rules. FRA believes that the program of testing prescribed will capture a sufficient number of events to indicate the persistence, or emergence of alcohol and drug problems on individual railroads, particularly on the Class I railroads that provide the great bulk of rail transportation services.

Second, post-accident testing is necessary to the process of regulatory development. Enlightened and proportional regulation will only be possible if the true causes of major human factor accidents are known. Results of post-accident testing will be essential to guide review of this final rule and may indicate the need for further alcohol and drug countermeasures. Better information on alcohol and drug involvement may also provide guidance on the need for more generalized measures designed to maintain train separation, better train handling or safer yard operations. Conversely, the success of a well-tailored regulatory program directed at alcohol and drug abuse may obviate or mitigate the need to introduce other countermeasures that may be less effective and more costly.

Third, post-accident testing will permit the NTSB and FRA to determine with greater precision the causes of major accidents of interest to the public. Such accidents threaten public confidence in the national rail system and can lead to legislative and private sector responses that, if based on erroneous assumptions, can actually be

counterproductive. Post-accident testing will fill a major gap in the knowledge customarily available after such events.

Fourth, post-accident testing will help to deter employees from using alcohol and drugs on the job. FRA recognizes that many substance-dependent employees are unlikely to be deterred from bringing their problems to work for the sufficient reason that they may be unable to abstain. However, it appears likely that at least half of the alcohol and drug-impaired employees involved in accidents and injuries on the railroads become impaired volitionally. Over a period of years, the rule will result in the testing of several thousand employees, many of whom may be found to be impaired. The disciplinary actions that will result from this program will be vivid examples to other employees who may be tempted to bring alcohol or drugs onto the railroad.

Although it is true that drinkers and drug users often believe that they have sufficient control over their behavior to avoid mistakes on the job—and thus will not expect to be the cause of accidents, as such—nevertheless, any railroader knows that the occurrence of accidents is largely unpredictable from the point of view of the employee reporting for work. Post-accident testing, like the authorization for breath testing described below, will increase the odds that the frequent drinker or drug user will be caught. In FRA's judgment, any perceptible increase in those odds will contribute directly to deterrence of job-related alcohol and drug use.

Finally, post-accident testing is necessary as a means of keeping the alcohol and drug problem squarely before the railroad industry. Historically, both public and private sector efforts have been less than fully vigorous, and less than fully effective, because those who have the capacity to take responsive action have not been confronted on a regular basis with fresh evidence of a substantial, continuing problem. Alcohol and drug involvement has not been fully documented and, even where documented, has often not been reported.

By contrast, in the field of aviation, regular testing after fatal accidents (a high percentage of aviation accidents) has had the effect of sensitizing aviators to the hazards of alcohol and drugs. This continuing testimony to the importance of fitness has, in the judgment of the Federal Aviation Administration, significantly reinforced the moral impact of the Federal regulations.

In the last two years a combination of several major alcohol and drug-related accidents and increased public attention

have spurred the railroads and rail labor to undertake significant initiatives that could contribute to a long-term change in attitudes among supervisors and employees. However, the history of anti-drinking efforts in other modes is that major initiatives often wane in effectiveness after showing initial favorable results. One important means of ensuring that progress is sustained over the long term is to document and publicize the continuing or recurring safety consequences of alcohol and drug abuse habits. Regular and effective documentation will never be possible, however, without a routine, mandatory procedure for obtaining toxicological data.

General objections to program.

Countervailing considerations do not offer a sufficient basis for forgoing this important component of the proposed regulatory program. Some of most vigorous objections to the program came from a minority of railroads that viewed post-accident testing as an undue burden. Commenters thought that testing in some of the cases proposed for inclusion would be fruitless, time consuming and costly. FRA has reviewed carefully the comments of these railroads and others who opposed the proposal. Those comments have helped FRA to achieve a more precise focus for the testing program, as described below.

FRA believes that mandatory testing is fully warranted in certain circumstances. By contrast, a system that permitted the railroads unfettered discretion in selecting events for testing would run afoul of considerations such as those discussed in the NPRM (NPRM at 146-148; 49 FR 24289). A brief summary of the considerations requiring post-accident testing is set forth below:

1. Detection of alcohol and drug use is difficult even for highly trained professionals. Railroad supervisors could be expected to detect only the most obvious cases (e.g., where the employee has the odor of an alcoholic beverage on the breath or exhibits extreme agitation or unresponsiveness). Yet alcohol and drugs can have substantial effects on human performance, particularly divided attention skills and judgment in responding to unusual situations, as well as general attention to duty, without the presence of significant outward manifestations.

2. The causes of many railroad accidents, including high damage accidents, fatalities in train incidents, and hazardous materials accidents, are difficult to determine in their immediate aftermath. Multiple causes are often involved, and determination of those

causes may not be possible until a field investigation is complete.

3. Local supervisors responding to the scene may perceive reasons why it may not be in their interest, or the company's interest, to pursue indications of alcohol and drug use. For similar reasons, employees are unlikely to be forthcoming.

4. Samples for testing must be obtained quickly if they are to provide optimal information, since appreciable levels of some common drugs are eliminated from blood within a matter of minutes or (at most) a few hours. A clear articulation of specific, mandatory testing requirements provides clear and unwavering guidance that makes it more likely samples will be obtained during the period immediately after the accident or incident when they best reflect on the relative fitness of the employee.

In sum, the actual role of alcohol and drugs in railroad accidents will be determined only if testing is mandated for a significant number of appropriate cases.

Cooperation of medical facilities.

Even some of the railroads that supported the mandatory testing provision believed that obtaining the cooperation of medical facilities in taking samples would present major problems in some localities. FRA is sensitive to this problem, but does not believe it presents an insuperable obstacle. The railroads will find that multiple resources are available in most communities, such as:

1. Public hospitals that will generally be responsive when the public safety purpose of the program is made clear.

2. Public and private clinics.

3. Physicians' offices, including those of physicians that already perform physical examinations for railroad employees on a fee-for-service basis.

FRA is also working with the Federal Aviation Administration to identify those Aviation Medical Examiners (AMEs) who would be willing to assist the railroads in obtaining samples. AMEs are private physicians who are qualified to perform examinations for FAA medical certificates. Many AMEs also assist FAA in conducting aviation accident investigations. FAA has indicated its willingness to include the FRA program in its orientation and training sessions for AMEs.

FRA believes that many railroads will establish ongoing contractual relationships with medical facilities to facilitate urine testing as authorized by Subpart D (discussed below). Many of these facilities should also be available for post-accident testing purposes.

FRA will distribute the final rule to major organizations representing the medical and health care community, requesting their assistance in publicizing the program and soliciting the cooperation of their members. FRA staff will also be available to contact individual facilities by telephone, as necessary, to explain the purpose of the program and endeavor to overcome any apparent obstacles.

Section 219.201 (§ 218.105(b) of the NPRM) describes the train accidents and train incidents for which testing is required. As a result of the cogent comments received in response to the NPRM and FRA's own continuing concern over the utility and reasonableness of the post-accident testing program, FRA has substantially reduced the number of events and redefined the types of events that will trigger the requirement of testing.

The proposed rule would have required testing after approximately 550 accidents or incidents each year. The NPRM proposed to select events almost totally on the basis of severity. The commenters are generally correct in stating that severity is not necessarily a good predictor of alcohol or drug involvement, although severity may be a good indication of the public's interest in accurate determination of cause.

In particular, the NPRM would have required testing after a significant number of derailments that involved either an injury or property damage of at least \$150,000. As a class, most of these events have historically been reported as track or equipment-caused; and, in fact, a large number of them are unlikely to involve alcohol and drugs as significant causal factors.

The final rule seeks to focus the post-accident testing requirement on events that fall into three categories. First, § 219.201(a)(1) lists those events that are of substantial public interest. They include train accidents resulting in a fatality, release of hazardous materials (accompanied by an evacuation or by an injury resulting from release of product), or damage to railroad property of \$500,000 or more. These are also accidents for which, based on FRA's experience, causal determination is often extremely difficult. Indeed, such accidents often involve two or more contributing elements.

The damage threshold of \$500,000 is stated as damage to railroad property because it will be necessary for the railroad supervisor to assess the damage. Often assessment of damage to lading or damage to third party property will be difficult, if not impossible, for the supervisor on the scene. The

approximate cost of damage to locomotives, freight cars, and fixed railroad facilities is much more readily determinable.

Second, § 219.201(a)(2) requires testing after an "impact accident" that results in a reportable injury or damage to railroad property of \$50,000 or more. The term "impact accident" refers generally to collisions, but the new term is employed to avoid problems of categorization deriving from the use of the term "collision" in FRA's accident/incident reporting system. (Section 219.5 defines "impact accident" to mean a head-on collision, a rear-end collision, a side collision (including a collision, at a railroad crossing at grade), a switching collision, or impact with a deliberately placed obstruction such as a bumping post.)

A very high percentage of impact accidents result from human performance failures. Railroad rules and signal systems are carefully designed to ensure that undesired impacts will not occur. If we are to determine the extent to which alcohol and drug use affect safety, it is crucial that testing be undertaken after these accidents. Nevertheless, FRA recognizes that burdens on employees and the railroads should be subject to reasonable limitations. Therefore, FRA has required that an impact accident meet one of two severity tests—reportable injury or damage of at least \$50,000.

Third, § 219.201(c)(3) requires testing after any fatality involving an on-duty railroad employee in a train incident. These are events involving the movement of railroad equipment that do not result in property damage meeting the current FRA reporting threshold (\$4,900 in 1985) but do result in a casualty. A substantial portion of these deaths are never adequately explained, but where autopsies are available on the deceased (even with questionable or very limited toxicology), about one in six of the victims is found to have appreciable levels of alcohol or drugs. (See NPRM at 22-24; 49 FR 24265-24266.) The distinct possibility exists that additional fatalities are caused by the performance failures of other members of the crews on which the fatally-injured employees work.

This requirement is also scaled-down from that contained in the NPRM. Testing would only be required in the case of fatalities, not loss of eye or limb. While these events are relatively few in number, they present particular difficulties. Eye injuries, for instance, happen somewhat unpredictably. Amputations are immediately followed by intensive medical treatment that will normally involve blood transfusions and

other procedures that can affect toxicological findings.

Further, only fatalities to on-duty railroad employees would trigger the requirement. This has the effect of excluding fatalities to trespassers, as was the case in the proposed rule. It also excludes fatalities to non-trespassers (such as passengers attempting to board moving trains or falling from moving trains). FRA's review of those incidents suggests that very few involve the possibility of human failure on the part of the railroad employees responsible for the movement.

Total accidents. FRA estimates that a total of approximately 150 to 200 accidents or incidents will be subject to testing each year based on the criteria stated above. All of these events will be of significant public interest, involve circumstances likely to include human failure, or be important to the safety of railroad employees.

FRA recognizes that this reduction of the number of events subject to post-accident testing is facially inconsistent with the position of GAO, which recommended that testing be undertaken after all reportable accidents. However, FRA believes that GAO's concerns with deterrence and data collection are adequately addressed by the final rule as a whole. The authorization for testing on reasonable cause, described below, will permit the railroads to conduct breath and urine tests after reportable accidents and incidents not subject to the mandatory post-accident testing requirements. The enumeration of data elements required in Part 217 reports (efficiency tests and inspections) will capture the results of all Rule G observations, including those that are accompanied by breath or urine testing.

Until the role of alcohol and drugs in railroad accidents and casualties is better defined, a broader mandatory program would not be warranted. Mandatory testing will involve not insignificant costs for each event. Were this mandate extended to all reportable train accidents, the railroads and their employees would be subject to substantial inconvenience, and railroad operations could be disrupted. Viewed from the point of view of prospective costs and benefits, FRA does not believe a mandatory testing program of that magnitude could be justified.

Section 219.201(b) excepts rail/highway grade crossing accidents from the requirement for testing. FRA has carefully considered the suggestion of NTSB and others that at least those grade crossing accidents that involve fatalities be subject to testing. However, FRA has concluded that such a course

would be costly and relatively unproductive. The total number of fatalities in grade crossing accidents has been cut in half over the past decade through better protection of crossings, grade separations, and educational campaigns. But there are still almost 400 collisions each year between trains and motor vehicles at rail/highway crossings that result in one or more fatalities and roughly 40 events that involve fatalities of pedestrians. A significant number of the train/vehicle collisions (almost one quarter) actually involve the motor vehicle driving into the side of the train, an accident modality that may be confirmed only after investigation and that virtually never would involve fault on the part of the train or engine crew. In the vast majority of the remaining accidents, the crew of the train has little or no chance to avoid the impact because of the very long stopping distances involved and the fact that it is the motorist (or pedestrian) who has placed himself or herself in a position of danger.

FRA recognizes that the acts and omissions of engine crews and train crews may at times contribute to grade crossing accidents to some extent. However, in the vast majority of cases railroad employees can only be viewed as additional victims of these tragedies, since they have no real opportunity to avoid them. Measures directed at the reduction of alcohol and drug use in railroad operations will, of course, tend to reduce the possibility that employee performance at grade crossings may be impaired. In FRA's judgment, no compelling case has been made for the major expansion in the post-accident testing program that would be required if rail/highway grade crossing accidents were to be included.

In addition, under Subpart D of the regulations (discussed below), the railroads will have discretion to conduct breath and urine tests after rail/highway grade crossing accidents where there is a reasonable suspicion that the employee is impaired or that the employee's conduct contributed to the occurrence or severity of the accident.

Section 219.201(c) provides that the railroad shall determine the existence or nonexistence of the factual conditions that require testing. Railroad officials are almost always the first to respond to the scene of an accident/incident. They must be relied upon to determine the facts if timely testing is to be carried out.

The railroad representative is required to make reasonable inquiry into the circumstances and consequences of the accident/incident

in order to determine whether testing is required. That is, the railroad representative determines what the facts are. Has anyone been killed or injured? Is there substantial property damage? If so, how much? Release of hazardous material? Evacuation? Injury from release of product? Is this an impact accident? How do these facts fit the requirements of § 219.201(a) and the exclusion in paragraph (b)? The section requires that, after such inquiry, the railroad representative must make a "good faith judgment" as to whether testing is required by the rules.

This paragraph does *not* give the railroad license to waive the mandate of the regulations nor (knowingly) to extend it. It does not excuse ignorance of the regulatory requirements. It does provide latitude to find the facts quickly and in the midst of what may be a difficult environment.

This provision is intended to be responsive to the concern of the railroads that they might be penalized for a good faith error or lack of information on the accident scene. The paragraph excuses good faith estimates of damage that ultimately prove to be too high or too low. Likewise, it excuses testing where an injury is not manifest on the accident scene (as in the case of exposure to toxic substance that produces illness the following day). It does not excuse a failure to make a good faith estimate of damage, a failure to inquire as to the condition of persons who may have been affected, or ignorance of the regulations.

If proper inquiry has been made and a good faith judgment has been rendered, then the decision to test or not to test is consistent with the regulations and the test is authorized. Employees must cooperate. It is not practicable to convene an arbitration panel to sort out the facts on the scene. Employees who are impaired and thus reluctant to be tested should not be invited to refuse in the hope that actual damages may come out \$1 shy of the threshold. By the same token, if a railroad representative should imagine the existence of facts that have no basis in reality, the hearing procedure required by § 219.213 will provide ample opportunity to set the matter right.

Section 219.203 describes who is to be tested and how it is to be accomplished. Paragraph (a) states that samples shall be obtained from "all covered employees of the railroad directly involved". FRA has considered the suggestion of some commenters that non-covered employees should also be subject to testing. Certainly there may be situations in which it would be desirable to test maintenance-of-way

personnel on the scene, a car inspector who performed an air brake test, or a supervisor riding in the cab of a locomotive. However, as a practical matter these occasions will be few and infrequent when compared to the situations where testing of covered employees is indicated.

FRA recognizes that at a future date it may be desirable to expand the scope of testing and continues to welcome the submission of any information pertinent to such a requirement. The performance of the present testing criteria and testing program will undoubtedly offer important information with respect to the expansion of the class of those subject to testing.

Paragraph (a)(2) provides that all crew members of trains (as defined in § 219.5) are to be tested. All train crew members have important safety functions, including the responsibility to monitor speed, inspect the train enroute through visual observation, report violations of safety rules (including Rule G) and (often) to communicate train orders and other information and perform brake tests at intermediate points. This requirement will shed light on the performance of the entire crew, including the fitness of the working supervisor and other crew members who may have participated in social drinking or drug use with an employee at fault. Note that this testing mandate is categorical and thus broader than the limited discretionary authority for urine and breath testing in § 219.301. The relatively broad mandate for testing of train crews reflects the fact that operating employees are most often at fault in alcohol and drug-related accidents and that some alcohol and drug-caused accidents in the past have involved apparent sequential or simultaneous failures of performance by two or more crew members. It also reflects the extreme difficulty of distinguishing fault and degrees of fault immediately after the more substantial accidents subject to this section.

Other covered employees directly and contemporaneously involved in the circumstances of the accident/incident must also be tested. For instance, a signal maintainer who was working on the controlling circuits of the territory at the time of a collision would also be tested. A dispatcher involved in a collision in train order territory would be considered to be directly involved unless the railroad determines in good faith that one of the trains was in noncompliance with a train order providing proper protection. These cases will require the exercise of some judgment, and the only alternative to the application of such judgment is to

require testing of all such personnel, even when there is no possibility that their acts played a role.

Paragraph (a)(3) provides limited exclusions from testing. In the case of an "impact accident" or "fatal train incident" (but *not* a major train accident) even train crew members may be excused from testing if it is immediately determined that they had no role in the direct cause(s) of the accident. For instance, after a collision it may be determined that a signal malfunctioned. Similarly, in the case of a train incident it may be known that the victim occupied a position of obvious peril on the track structure despite the maintenance of normal communications by the crew handling the movement. The railroad must be able to support its determination to exclude employees from testing under the circumstances specified. Because the potential exists for misuse of the exclusion, the rule does *not* contain any exception for an erroneous determination made in good faith.

Special rules apply where non-covered employees are involved in an accident or incident. Although surviving non-covered employees are not subject to testing, samples must be obtained from the remains of a non-covered employee killed in a train incident or train accident.

Paragraph (b) requires that every reasonable effort be made to assure that samples are provided promptly. The paragraph recognizes certain situations in which it may be necessary for employees to complete certain duties prior to testing.

Paragraph (c) states that samples are to be collected at an independent medical facility. Blood is to be drawn only by competent personnel. If an employee is injured and goes to a medical facility for treatment, that facility should be requested to obtain the samples.

Paragraph (d) sets forth a procedure to follow if the treating hospital or other facility is reluctant to cooperate. It requires the railroad to make reference to the specific requirements of these regulations, if necessary to obtain the cooperation of the medical facility. (The regulations do not govern the conduct of the medical facility, as such. However, the fact that a test procedure is conducted in compliance with a Federal safety mandate will be persuasive to most administrative and medical personnel of these facilities.) If the injured employee is unconscious or otherwise unable to evidence consent and the medical facility declines to obtain a blood sample after being

acquainted with this part, the railroad is required to contact FRA through the National Response Center.

Paragraph (e) recognizes the discretion of a physician to determine whether blood can be drawn with safety from an employee who is injured or suffers from any condition providing a contraindication to the procedure.

Section 219.205 sets forth general requirements for obtaining, sealing, marking, and shipping the samples. Technical procedures applicable to this process are contained in the Field Manual currently in preparation. The Field Manual will be available for the implementation conferences described in the introductory material to this notice. It may be revised from time to time in order to address emerging problems and assure that the procedures are efficient.

FRA has included a requirement for information sheets to be shipped with the samples. The railroad representative will be required to complete one information sheet per kit (usually one per accident). A separate sheet is to be completed for each employee. This information required on the forms is limited to that necessary to accomplish the toxicological analysis and to provide notice of the results of the analysis.

The final rule also states that the railroads are responsible for shipping samples prepaid. Although FRA will absorb the cost of toxicological analysis and notifying the railroad and the employee of results, the cost of shipment should properly be borne by the railroad, since it is a cost avoidable only through the actions of the railroad.

Section 219.207 makes special provision for obtaining samples in the case of fatalities. The railroad is required to make immediate contact with the custodian of the remains to request samples, providing a kit for shipping and, as necessary, arranging for shipment by air freight. Where cooperation is not forthcoming the railroad is to notify FRA at a designated telephone number. FRA will then contact the custodian and take appropriate action to obtain the samples.

A qualified person who obtains necessary samples is the delegate of the Secretary of Transportation within the meaning of section 208 of the Federal Railroad Safety Act of 1970.

The Field Manual contains details concerning sample selection and handling of samples.

Section 219.209 deals with notifications to FRA when tests are conducted and when required tests are not conducted. When tests are conducted, notification is to be provided

to FRA by telephone. This will permit prompt coordination of the FRA field investigation with toxicological analysis by CAMI.

If the railroad is unable to obtain one or more samples as required by this section, the railroad is required to append a short narrative description of the reason for such failure to its accident/incident report filed under Part 225, consistent with instructions in the Reporting Guide. FRA is revising the Reporting Guide to permit computer identification of this data element.

Section 219.211 describes FRA's actions on receipt of samples. Analysis is undertaken as quickly as possible, consistent with the need to achieve scientifically valid results and relate them, preliminarily, to the circumstances of the accident or incident. (For instance, in some cases positive findings may be made for drugs administered after an accident or for drugs taken under a doctor's care for which a well regulated regimen can be established. In such cases, public release of incomplete information could materially prejudice the employee.)

The employee is permitted to respond to the test results prior to the development of any final FRA investigation report. The toxicology report and any response are also made available to the NTSB (with respect to an event investigated by that agency).

During public proceedings on the NPRM, AAR and certain railroads pointed out that some of the collective bargaining agreements require the railroads either to charge, or commence investigations, for violation of railroad rules within established periods. Although some of these periods begin to run only when the violation becomes known, others begin to run on the date of the violation. The railroads therefore requested that FRA make available the results of the toxicological analysis within 72 hours. Although it may be possible to provide such results within a very limited time period for events that involve negative findings on all screening tests or only blood alcohol levels, in other cases, particularly those involving drug use, considerably longer periods of review may be required.

FRA believes that the integrity of the testing program is best served by providing whatever time CAMI requires to achieve valid and complete results. Further, it must be noted that CAMI also serves its parent organization, the FAA; and it is not uncommon for aviation and railroad accidents to occur in quick succession of one another, followed by periods of light activity. Obviously, accommodation must be made to the

laboratory's need to deal with periods of heavy activity.

Nevertheless, the prohibition of alcohol and drug use on the railroads will not be respected if employees can escape normal disciplinary consequences solely as a result of agreement provisions that do not mesh well with the cycle of toxicological analysis following significant accidents. Therefore, paragraph (c) of § 219.211 provides that agreement periods with respect to charging employees and conducting investigations are tolled during the period between the accident or incident and receipt of the results of toxicological analysis, solely with respect to violations of Part 219 or the railroad's alcohol and drug rules. Where the railroad does obtain information sufficient to charge, it must do so. If the employee is held out of service during the waiting period, the employee must be advised of the reason.

This provision does not authorize holding any employee out of service pending receipt of test results, except to the extent it tolls the agreement periods. Nor does the section restrict the railroad from holding an employee out of service for other rule violations growing out of the accident or incident.

Railroad disciplinary proceedings after accidents and incidents normally address all conduct relevant to the event in question (charges are consolidated for investigation). It is important that the minor procedural adjustment required by the regulation not produce duplicative investigations that could prove detrimental to both the employee and the railroad. Therefore, the rule tolls the maximum agreement periods with respect to all matters growing out of the accident or incident.

Paragraph (d) states that FRA retains all samples for at least six months after the accident or incident for its own purposes (e.g., to permit reanalysis of a sample if another laboratory reported detection of a substance not tested for in the original procedure). However, the samples may be produced for litigation purposes, consistent with the notice provisions contained in the regulation and the lawful order of a court of competent jurisdiction.

Collateral proceedings. FRA wishes to stress that the purpose of this Subpart is not to fix blame (or determine liability) in any civil or criminal proceeding but to promote the reduction of accidents and casualties caused by alcohol and drug use. FRA/CAMI facilities and personnel may not be used as consultants by parties engaged in private litigation growing out of an event subject to this Subpart. In no case will such personnel

be permitted to give expert testimony in such litigation. (See 49 CFR Part 9.)

Section 219.213 deals with the problem of employees who unlawfully refuse to provide blood and urine samples. The emphasis here is obviously on refusal. An employee who in not asked to provide samples or is unconscious clearly can neither affirm the required consent nor make the decision to refuse.

The regulation, which has the same effect as Federal statutory law (unless restrained or enjoined in its operation by a reviewing court), both implies and requires consent (sec. 219.11) to the taking of samples. The employee who does refuse to cooperate does so unlawfully (the employee has the power to refuse, but not the right). In no case will any type of physical coercion be used to effect cooperation.

The disqualification requirement is based on two concerns, either of which is sufficient in FRA's judgment to support the requirement. First, it must be known that a refusal will give rise to an unacceptable consequence if testing is to be accomplished on a uniform basis. Any disqualification actually applied is therefore intended to have a future deterrent effect, both particular and general. Second, most refusals will be by employees who know that they are impaired by alcohol and drugs. These individuals should be removed from covered service for a reasonable period to permit them to achieve control over their substance abuse problems and to reflect on the consequences of noncomplying conduct. Again, the purpose is not to punish but to foster safe conduct.

If an employee does refuse, the regulation requires that the employee be disqualified from covered service for a period of nine (9) months. FRA continues to believe that setting a regulatory benchmark is necessary to ensure fair and equitable treatment. FRA cannot and does not restrict any discretion available to the railroad to apply sterner discipline for the refusal as an act of insubordination. However, it is important that the railroads (and arbitrators) know what is required to effect the purposes of the regulations. Employees should not be subject to more drastic sanction solely because the employer believes that FRA will view a lesser action as a violation of its duties under the regulation. By the same token, employees of different railroads should know that they will receive equal treatment with respect to the violation of the Federal regulation—no better, no worse.

Some of the railroads wanted FRA to prescribe dismissal as the sanction for

refusal. This is simply not possible. FRA has no jurisdiction to terminate employment relationships; nor would it be useful to do so, since the railroad would be free to reinstate the employee at will (eliminating the uniformity of treatment sought in the first instance).

FRA agrees with the concern raised by some commenters that the 6-month disqualification period proposed in the NPRM may not be of sufficient duration to produce the desired effect—compliance with the testing requirement. Virtually all railroads, upon establishing a Rule G violation in connection with a significant accident, would take the action of dismissing the employee; and few would consider reinstatement in such a case until the passage of at least 9 months to a year. Accordingly, paragraph (a) extends the minimum period to 9 months in order to create an incentive to testing that more nearly approaches the disincentive created by the prospect that the Rule G violation will be detected.

Paragraph (b) of § 219.213 is devoted to procedural requirements for hearings called to determine the facts with respect to an alleged refusal. The provision requires notice and an opportunity for a prompt hearing. Where the provisions of a collective bargaining agreement govern such hearings ("investigations," in railroad parlance), compliance with the collective bargaining agreement (and attendant procedures for adjustment of disputes) satisfies the requirements of the rule. The agreements have consistently been construed to require adequate notice of the changes and a full hearing on all factual issues. Further, by virtue of their procedural provisions, the collective bargaining agreements define the extent of the employee's contractual right to exercise seniority to occupy a position in covered service. Compliance with the agreements thus provides its own measure of the process due with respect to any property interest that may be alleged to be abridged by the disqualification. An agreement employee also enjoys the right to have an unresolved dispute adjusted by a neutral arbitrator (under section 3 of the Railway Labor Act). No purpose would be served by requiring a separate "Federal" hearing, and no such redundancy is intended by the rule.

FRA intends that burden of proof be governed by the applicable agreement (if any). In the absence of an agreement, the railroad should bear the burden of establishing the existence of facts requiring the test (or giving rise to the good faith judgment that testing was required), the fact that a request was made, and the fact of the refusal. The

employee would then be required to counter the railroad's presentation (or to demonstrate that the refusal to provide blood was based on competent medical advice, if such is contested).

Paragraph (c) endeavors to describe the issues that must be resolved in determining whether a disqualification is required and draws on the comments of the ACLU. The employee can contest whether there was a refusal, whether the accident or incident required testing (or whether, in a marginal case, the railroad representative made a good faith determination that it did), and whether, in a case where blood was refused based on health concerns, the refusal was made in good faith and based on medical advice. Commenters have not suggested additional situations in which a refusal might be excused, and FRA is unable to craft further excepting language that would not be subject to misinterpretation and uneven application. Therefore special circumstances (if any) will have to be left to case-by-case review.

3. Authorization to Test for Cause

a. Summary of Proposed Rule (§ 218.109)

The proposed rule would have granted the railroads authority to require employees to submit to testing of breath and urine samples on reasonable suspicion of current impairment, after reportable train accidents and incidents, and after certain rule violations involving the potential for train accidents (criteria deemed to constitute "just cause"). The practical effect of the rule would have been to displace the effect of the NRAB ruling on random breath testing and to preempt any state laws limiting the ability of the railroads, as employers, to implement a testing program of the kind proposed to be authorized. Employees would have been required to submit to testing as a condition of employment in covered service.

The categorical situations in which testing was proposed to be authorized contained a number of limitations. For instance, testing on reasonable suspicion was limited to the personal observations of the supervisor, in contrast to reliance on second-hand information. Testing after accidents/incidents and rule violations was limited to employees directly involved in those events. A rule violation involving overspeed operation would have served as a basis for testing only if the violation was at least 10 miles an hour over the maximum allowed. On the other hand, the rule violation criterion contained a general authorization to test after a

"violation of any other operating rule . . . or other written directive of the kind which directly affects safety movement of a train, switching movement or lite engine in a way that could result in a train accident. . . ."

The proposed rule limited the number of tests to three in any 12-month period and two in any 30-day period.

Certain safeguards were contained in the proposed rule. Breath testing devices were to be evidential quality and were to be used only by a qualified operator. "Replicate" tests at 20-minute intervals were required to ensure that the device accurately measured deep lung air. Finally, any test result of less than .02 percent was to be deemed a negative test.

Safeguards were also proposed for urine tests. Samples were to be collected at a place of reasonable privacy, subject to the presence of a person of the same sex to ensure that the sample presented was actually that of the employee tested. The sample was to be marked and sealed in the presence of the employee; and the railroad was to maintain a controlled chain of custody and take precautions to maintain sample quality. Confirmation testing was required in the case of a sample found positive for a drug other than alcohol. Any test result convertible to an estimated BAC below .02 would have been deemed a negative result.

In the case of a positive breath test or a urine test, the employee would have the right to demand a blood test at an independent medical facility or laboratory.

Finally, the proposed rule provided that an employee who tested positive for a "material quantity" of alcohol or a drug in a urine test and who was offered and declined the opportunity to provide a blood sample, could be presumed to have been impaired by the substance detected.

b. Public Comment

As expected, the authorization for breath and urine testing on "just cause" was the most hotly contested proposal in the NPRM. NARUC, the AMA, NTSB, the Louisiana State Police, five railroads, and one local labor representative supported the provision. Another railroad specifically said that it welcomed the right to test, but not the obligation. A BLE general chairman approved testing with some qualifications, including the requirement that supervisors administering tests be certified. Another local BLE officer favored testing if the railroad utilize it in a way that respects employee rights and if bypass and companion agreements are put in place.

The RLEA, UTU and several local labor representatives strongly disapproved. BLE strongly objected to testing in the absence of "compelling probable cause," by which it meant "lack of coordination, incoherence in speech, and other recognized visual evidence of intoxication." BLE thought that this "concession to testing," together with implementation of prevention programs, would be "the most effective way to deal with the overall problem." A locomotive engineer saw the proposal as vague, arbitrary and inviting abuse. A small freight railroad thought that testing on reasonable suspicion should be authorized, but disagreed with the other two prongs of the just cause testing authority (testing after accidents/incidents and rule violations).

The National Industrial Traffic League, AAR, and five railroads urged that the railroads be granted the authority to test without specific cause (so-called "random testing"). But the AAR and most commenting railroads nevertheless appeared eager to obtain the limited authority proposed, if that were the only authority they could obtain.

Deterrence. The purpose of the proposed testing authorization was to enhance the ability of the railroads to detect job-related alcohol and drug use (and immediately remove unfit employees from service) and to deter such use by increasing the perceived risk of detection. A consultant filed comments indicating doubts concerning the deterrent value of the authorization, as proposed, and recommending use of "random testing" on the model used by the United States military. (In general, the military services test to determine drug use, not drug impairment.) A freight railroad thought that the proposed testing authority was of little use, because of the safeguards and restrictions imposed. The railroad said that it already offers employees the right to a test at a local hospital where a Rule G violation is charged.

Another freight railroad said the proposed authorization for testing is ineffective because it comes into play too late. Amtrak said it did not object to reasonable safeguards but questioned the deterrent value of the proposed rule. But the majority of railroads appeared to view the proposed authority as useful, particularly if one or more conditions were to be removed. A major freight railroad said that the provision was necessary and would have the desired deterrent effect.

Random testing. AAR and several major railroads continue to believe that unannounced spot testing of all

personnel found at particular locations is the most effective means of deterring rule violations. Comments on random testing received in response to the NPRM do not differ materially from those received in response to the ANPRM and analyzed in the NPRM. Colloquies in the hearings indicated that those railroads advocating "random testing" also want the ability to focus on individual locations presenting compliance problems, as well as the authority to do system-wide programs of testing. AAR said it would not object to a two-level review process for testing operations under which a high-level railroad officer would have to pre-approve the use of this authority. During the hearings, "random testing" was also called testing "on a controlled random basis" or "patterned basis," and "periodic unscheduled testing."

Although most commenters favoring "random testing" relied upon its superior deterrent effect, one freight railroad noted that this tool would be useful in detecting persons at lower BACs whose judgment (in the commenter's view) might be affected but who might not appear to be impaired.

Amtrak cited its special responsibility for the transportation of passengers as a basis for "random testing," but did not ask for special treatment. Like other "random testing" advocates, Amtrak relied upon its potential deterrent value in urging FRA to include an authorization in the final rule. Unlike other advocates, Amtrak appeared to have given some thought to the frequency with which the tool would be applied, at least in certain settings.

The Washington Legal Foundation agreed that there is justification for deferring a decision on "random testing," but said that FRA should review the effectiveness of the final rule for one year and reconsider random testing in light of the results of the approach contained in the NPRM.

One of the railroads said it would recede from its request for random testing if FRA would grant the proposed authority without the following limitations: the 3-test limit, the 10 m.p.h. requirement for testing after speed violations, and the requirement that BAC readings below .02 percent be disregarded.

Terminology. One commenter, a consultant who has served as head of a Federal law enforcement agency, expressed reservations with the term "just cause testing." He viewed it as having legal connotations and said that the real question is whether a given employee is fit for duty. In the commenter's view, the supervisor should

not attempt to "diagnose" the employee's condition, only use testing as a means of determining whether drug use may be at its root.

Congressional comments. FRA received several Congressional comments that appeared to be directed most specifically at the proposed authorization to test for cause. Rep. Jack Fields (Texas) stated his opposition to mandatory testing provisions of the rule, favoring Operation Red Block as an appropriate approach to the alcohol and drug problem. Rep. Tom Leoffler (Texas) wrote to support "reasonable measures which effectively increase railroad safety for employees and the traveling public." However, he also urged that FRA consider the "rights and interests of . . . employees" as expressed by their representatives in the process of public participation. A comment by Rep. Nick Joe Rahall II (W. Va.) is reported below.

Coverage. BRS and some other labor commenters asked that employees be given the right to demand testing of supervisors under the same conditions agreement employees are required to submit to testing. The railroads appeared to agree that officers could be tested, but wished to reserve to management the determination as to when such testing would be done. A local BLE officer suggested that car inspectors be subject to testing, and other commenters raised similar concerns (noted above) with respect to the general coverage of the proposed rules.

Reasonable suspicion. BRS found the authorization to test on reasonable suspicion "very subjective," advocating corroboration by a second person. RLEA said the corroboration should come from a person who is not a company official. AAR suggested that the railroads be given the right to test based upon receipt of information from persons who have observed an employee drinking immediately prior to going on duty or while the employee is on duty.

Two labor commenters thought supervisors should be trained to identify the signs of alcohol and drug impairment before they sought to employ the authority to test on "reasonable suspicion."

In discussing testing on reasonable suspicion, commenters noted that supervisors might mistake fatigue or illness for signs of alcohol or drug impairment. The AAR responded that supervisors know the working conditions of employees and thus are able to apply appropriate standards to evaluation of the need for testing.

Reportable accident/injury. There was a remarkable lack of comment

specifically addressed to this prong of the proposed just cause authority.

Safety rule violation. RLEA asked for deletion of the authority to test after a safety rule violation, seeing it as "additional potential for harassment and abuse." BLE objected on the ground that there are many instances when engineers "are instructed by their supervisors to violate rules." Several local labor representatives thought that § 218.109(b)(iii)(F) ("violation of any other operating rule . . . which directly affects safe movement of a train . . . in a way that could result in a train accident . . .") needed further refinement to make it more definite. The commenters apparently meant to suggest that very minor violations would be used as a pretext for selective enforcement.

Overspeed. The most frequent comment on the safety rule violation prong of just cause testing related to the provision on overspeed operation. The propose rule would have permitted testing after any overspeed at least 10 m.p.h. greater than that authorized. AAR and most of the commenting railroads advocated that testing be authorized after any overspeed. They believed that use of a testing threshold greater than authorized speed would indicate to employees that speeding is acceptable. (No such implication was intended.) Some railroads noted that a few miles an hour could make a difference with respect to operations of trains on jointed track in the critical speed range. It was also noted that loading operations involving bulk products are conducted at very low speed and that very slight variations could be indicative of a serious human performance problem. The railroads also cited the yard limit rule (see 49 CFR 218.35), on the one hand, and high speed operation of high tonnage trains, on the other, as factors requiring careful compliance with speed limitations.

One railroad would permit testing after operation of a train at an "unreasonable speed." Another railroad suggested that retention of the 10 m.p.h. rule would suggest approval of speed violations below that figure.

RLEA, on the other hand, specifically singled out this testing criterion for criticism, apparently believing that its inclusion would result in abuse even with the 10 m.p.h. requirement.

Restrictions; general comments. AAR and a commuter railroad said that the proposed rule was encumbered by conditions and limitations "which severely restrict the utility of the provision." Otherwise, said the commuter railroad, it would be a "most effective tool for deterrence." Another

commuter railroad wanted the ability to obtain blood samples, as well as urine and breath, and to require employees to submit to testing while "subject to duty," as well as during duty hours. A major freight railroad also wanted not to be limited to breath and urine.

AAR asked that FRA include explicit rule language affirming that the testing authority proposed to be conferred does not limit the railroads' discretion to make their Rule G cases on the basis of supervisory observations (as is the case today).

RLEA thought the standards for testing were "too vague" to be meaningful limitations on the railroads' authority to test. A local BLE officer believed testing on reasonable suspicion was essentially the same as "random testing" and thus likely to produce incidents of harassment. The commenter believed supervisors should be trained to be familiar with the symptoms of impairment and should be acquainted with any employee evaluated for testing. Apart from these suggestions, however, labor representatives did not suggest specific means by which the proposed authority could be appropriately limited, assuming it were to be retained in the final rule.

BRS did suggest that persons operating breath devices should be certified and that equipment should be calibrated at least once each week. BLE urged that urine containers should be sealed in the presence of the employee with a tamper-proof seal and that the specimen be analyzed by a "neutral" laboratory.

A railroad asked that the term "qualified operator" be clarified.

A consultant indicated that the option on the part of employee to obtain a blood test weakens the testing system, because the psychoactive substance may be out of the employee's blood by the time a blood sample can be drawn.

Harassment fears. UTU and several labor organizations thought just cause testing authority would result in unchecked harassment of individual employees who might be in disfavor with railroad management or who might be involved in efforts to advance a specific labor interest (such as retention of cabooses). One labor commenter thought railroad management would use testing as a response to employee complaints concerning unsafe equipment. The nature of this harassment appeared to fall into two categories: (1) repeated testing of fit employees; and (2) selective enforcement against employees with small quantities of alcohol (or drugs) in their systems. Commenters complaining

of potential harassment generally failed to explain why the safeguards built into the NPRM would not avoid or mitigate the harassment potential with respect to alcohol or drug-free employees.

A conductor feared repeated testing under circumstances where there might be no witness. He believed employees would have difficulty in refusing tests beyond the limit imposed.

In the hearings, it was noted that supervisors already have the practical ability to "harass" employees by a variety of means other than requiring them to submit to breath testing. FRA attempted to determine the nature of employee concern in this regard. One employee witness said that the qualitative difference between existing management powers and the proposed authorization to test was that the sanction for a Rule G violation is dismissal.

3-test limitation. The proposed rule would limit the railroad to two negative tests of any individual in a month or three in any 12-month period. One labor organization commented favorably on these limitations, while eleven railroads opposed them.

The objections to the limitations fell into three categories. First, the railroads found this limitation unworkable from the point of view of the supervisor confronting a crew in a situation such as the following: the crew is away from its home division on an interdivisional run; the site is remote; it is the middle of the night. In the railroads' view making an accurate determination of the number of prior tests for a particular employee would be very difficult.

Second, a commuter railroad objected to the record keeping necessary to monitor the tests.

Third, the railroads saw the 3-test system as an invitation to abuse. It was predicted that some employees would deliberately call attention to themselves in order to exhaust the three tests, after which they would be free to use alcohol and drugs without fear of detection. A major railroad called this approach a "prescription for disaster." Another railroad called the limitation a "license to imbibe." The railroads did not explain why employees found to be clearly under the influence could not be disciplined based on the same type of evidence currently used (supervisory observations of behavior, demeanor and body odors).

Fourth, some railroads thought record keeping to monitor the limitations would be burdensome.

A major freight railroad presented a notable contrast to the position of the other railroads, saying it would plan to handle each test up to headquarters

level, keeping records on the results of each test and the follow-up action. This commenter would consider using the timetable notification system to determine status in the field. However, the commenter recommended that the limitation be three tests in any quarter, rather than three tests in any 12 months.

One commenter also objected to the bar on further breath testing in a particular duty tour after a breath sample tests negative, evidently on the dual grounds that (i) it would be difficult to determine if the employee had been tested at a different location on the same day and (ii) adequate grievance procedures are available to address any case of harassment.

Finally, a freight railroad that had commented to the effect the proposed rule would not be effective nevertheless took the trouble to comment that any pre-employment drug screen should not be counted against the limitations on number of tests under the instant provision.

Urine collection. Rep. Nick Joe Rahall II and a West Virginia BLE officer objected to the observation of urination by a railroad supervisor. The commenters believed that collection should be done at a doctor's office or other medical facility. Rep. Rahall expressed the view that standards of decency require collection at the medical facility. Neither commenter provided a technical rationale why collection could not be undertaken as proposed. However, the labor commenter did indicate concern that the railroad could tamper with a sample collected on the property. The commenter said he did not object to providing samples, only to the method proposed for collection.

Below .02. The proposed rule provided that breath and urine test involving an estimated BAC below .02 percent would be deemed negative tests. The NPRM said that the purpose of the provision was "to avoid controversies over the presence of alcohol in patent medications, mouthwash, and the like." The notice went on to request comment on how the dismissal of low readings could be reconciled with the appropriateness of retrograde extrapolation for employees who might show low BACs 8 or 10 hours into their duty tours.

Seven railroads and the AAR objected strenuously to this provision. AAR thought it was "a clear statement that a little bit is okay," but conceded in response to an FRA question that in most cases an employee would not be fired for having "just one beer" prior to duty under current practices (roughly equivalent to a BAC of .02 percent for

the average subject within an hour after consuming the beverage). A major freight railroad said the adoption of the provision would emasculate "the industry's most important rule" while "sending a clear message to employees that it is permissible to be 'just a little bit under the influence.'" Railroad commenters noted that mouthwash which is not ingested is cleared from the mouth within the 20-minute interval between breath tests. A major freight railroad expressed concern with both rising and falling BAC levels, since a .015 percent reading, for instance, might represent the early stage of the absorption curve.

Some employees appeared to be concerned that trace levels of alcohol detected by a breath device (or otherwise) might be used as a basis for discipline. A local UTU union officer, for instance, called attention to a July 1984 incident in which a railroad dismissed an employee for a measured BAC of .01 percent (blood), apparently suggesting that the railroad may have influenced the outcome of the test. In order to evaluate the comment, FRA obtained the carrier investigation of the incident. In that case, the railroad had requested a re-analysis of a blood sample that tested negative in a hospital laboratory. The sample was sent to a laboratory that performs forensic work, and the laboratory reported a BAC of .01, which was not inconsistent with the report from the hospital, given the different sensitivities of the techniques. The railroad relied upon the perceived odor of an alcoholic beverage and the blood test as a bases for disciplinary action.

Other comments were directed at the capabilities of the breath testing devices themselves. Some of the commenters indicated approval of the under-.02 provision in those cases where there is reliance upon a breath device. The Chairman of the NTSB said that the Board would not want to see discipline at the .02 level based on a breath test. He continued, "I think we can fairly conclusively say that .01 would not affect performance and at .02 percent there is some latitude in the [breath testing] system and in some of the laboratory analyses of blood." Both NTSB and a toxicologist who supervises a commercial laboratory said that alcohol can be found at trace levels in any individual. (There appears to be lingering dispute among scientists whether trace levels often detected in subjects thought not to have consumed alcohol are the result of naturally occurring alcohol or merely reflect problems with equipment or technique.) One railroad disagreed with this

premise, contending that breath devices can accurately measure BAC at any level.

In its written comments the NTSB said that a test result of .02 or below "should not be rejected if other evidence shows alcohol was ingested while on duty."

Concern over the usefulness of low BAC readings was not limited to breath testing. A railroad commenter noted that estimating BAC readings from urine alcohol concentration is more difficult and less precise than use of breath testing.

Presumption of impairment from positive in urine. The proposed rule states that the presence of a "material quantity" of alcohol or a drug in the urine may be used as the basis of a presumption of impairment, if the employee decline the opportunity to provide a blood sample. This presumption is particularly critical to the proposed shape of the regulations, since many drugs and their metabolites can be detected in urine for several days after use (and usually for periods longer than any expected performance decrement from their use). Despite the novelty of the proposed presumption and its criticality to the regulatory scheme, it drew comments from only three parties.

Three railroads thought the requirement of a "material quantity" was ambiguous and undefined. One major freight railroad said the presumption should be mandatory, presumably to avoid the situation in which an arbitrator might endeavor to overturn the railroad on the facts.

Labor representatives did note that urine is not an acceptable fluid for determining impairment. Several of the labor spokesmen suggested that the railroads and FRA have no right to govern off-duty drug use. However, labor commenters did not directly challenge the logic of relying upon a non-invasive sampling technique while permitting a presumption of impairment to attach where the employee does not volunteer to provide a blood sample.

Discipline, negotiation and regulation. Closely related to the issue of testing is the matter of fact finding in disciplinary proceedings and subsequent arbitrations. A local BLE officer questioned the use of railroad-administered testing on the apparent ground that the railroads are likely to be unfair in the discipline that they assess and that the process of arbitration under section 3 of the Railway Labor Act does not involve sufficient procedural protections.

The same commenter urged that any tests should be conducted by an independent facility—again suggesting

lack of confidence in the railroads. But the commenter also said FRA rules would frustrate the process of negotiation under the Railway Labor Act, apparently indicating that the commenter believes accommodation on these issues is possible.

Another local BLE officer also suggested that FRA should not interfere in what he viewed as a matter for collective bargaining. But the commenter indicated that any rule adopted should provide a grievance procedure under which an employee could appeal being required to be tested for a "minor infraction."

c. Final Rule Provision (Subpart D)

The primary weakness of the current system of rules compliance on the railroads is the detection of violations. According to the REAP Report, at least partly because the vast majority of violations is not reported, fewer than 1 of 200 violations actually leads to dismissal. Infrequent detection fosters lax compliance among the minority of employees who lack a sense of responsibility, as well as permitting the substance dependent employee to go undetected. There are at least two reasons for this. First, the railroads operate over extensive territories. Supervisors cannot possibly monitor employee conduct continuously. Indeed, in a minority of cases it is possible for crews to report for duty, perform their responsibilities, and go off duty without coming into contact with a supervisor. FRA does require the railroads to have programs for monitoring compliance with their operating rules (including Rule G) (49 CFR Part 217), but these observations often are not sufficient to deter Rule G violations.

Second, as discussed above, detection of alcohol and drug use is difficult, at best. The odor of certain alcoholic beverages may be detected if the employee has not masked it with tobacco or used a deodorizing agent. The occasional social drinker who exceeds his or her "limit" can be detected by speech or behavior. But the employee with a moderate BAC, the regular drinker, the habituated alcoholic, and most drug users can successfully conceal their impairment, at least for the short periods needed to withstand the scrutiny of the supervisor.

Coverage. As with other provisions of the rule, there was disagreement among the commenters with respect to those persons who should be subject to any breath or urine testing requirement. FRA recognizes that supervisors and managers play an important role in the safety of the railroads. However, there is no reason to authorize testing of non-

agreement employees by Federal rule. In general, the railroads are already free to require management employees to submit to testing at will. Nor would the interest of safety be served by giving employee representatives the power to demand tests of management employees. These rules do not sanction a game of mutual reprisals but a limited program of testing to determine fitness.

Random testing. Several participants in this rulemaking continue to contend that the appropriate response to this problem is "random" testing, which generally is used to mean testing without cause or prenotification, but with the hope of creating an atmosphere of general deterrence. Apart from the arguable inefficiency of this approach, FRA has rejected it because it does not appear to be fair to subject the majority of sober employees to testing in the absence of some reason to question their fitness. See MPRM at 80-85; 49 FR 24276-24277. While a programmatic style of random testing might avoid some of the potential constitutional issues regarding "random testing" (see Legal Issues, below), it is by no means clear that the railroads are willing to limit themselves to a strictly random approach. Indeed, some of the railroads clearly wanted to be able to target specific locations. Comments received in response to the NPRM generally did not evidence careful thought concerning how such authority would be implemented or at what cost.

FRA believes that more measured responses deserve a trial before any decision is made to authorize random testing.

Arguments opposing "just cause" testing. FRA is equally unpersuaded by the arguments of the labor organizations that limited in-service testing authority will somehow create a "police state" and chill employee enthusiasm for cooperative prevention programs. Most employees appear to agree with the proposition that job-related alcohol and drug use cannot be tolerated, and they will welcome the leverage provided by appropriate testing authority. Like employees in other industries, many railroad employees who have substance abuse problems will not seek help until they perceive that it is necessary course to avoid exceedingly adverse consequences. The pincer movement created by active employee involvement, on the one hand, and strict enforcement augmented by enhanced detection capability on the other, should help to provide the necessary incentives to seek help. FRA believes that over the long term employees will recognize and approve of this beneficial effect.

The railroads that have entered into bypass agreements and other cooperative ventures have not simultaneously eschewed the disciplinary approach. In some cases, they have redoubled their supervisory observations or have employed other tools. The experience on these properties has tended to demonstrate that prevention and enforcement reinforce one another, rather than acting at cross purposes.

The nature of the testing process should also be considered. The final rule authorizes only breath and urine testing. Neither is invasive or painful. Breath testing can be accomplished on the railroad property without any embarrassment and with little disruption in the work day. As described below, the final rule avoids any perceived embarrassment by requiring that urine be collected at a medical facility under the supervision of personnel of that facility.

Neither breath nor urine testing need be performed in an accusatory fashion. To the contrary, the position of the supervisor should be simply that company policy requires testing in certain situations, consistent with the authority made available by the regulations. Cooperation in testing is merely one more effort required of employees in the interest of their safety and the public safety.

Unlike chemical tests used in the enforcement of drunk driving laws, tests authorized by this final rule will not be accompanied by arrest, detention, or other deprivation of liberty. Testing authority is granted to assist the railroads in fulfilling their obligation to the public safety by maintaining good rules compliance among their employees.

Harassment. Employees and managers on the railroads already have the ability to harass one another, if it is their desire to do so. To their credit, they seldom take advantage of these opportunities. Instead, they recognize that it is in their mutual interest to provide safe and efficient transportation services, meet the intermodal competition, and to maintain reasonably sound labor-management relations in aid of those objectives. Nevertheless, disputes do arise and they sometimes involve charges of harassment.

FRA has consistently sought to understand the frequently expressed concerns of labor representatives concerning their perception that testing authority would materially increase the ability of management to harass employees. FRA's bewilderment at this contention has been particularly acute since FRA has on its staff scores of

people who have decades of service in the railroad industry. It cannot be doubted, of course, that the stresses of labor management relations and ordinary interpersonal relationships could give rise to ulterior motives for use of the testing authority—just as it could give rise to any variety of other instructions that might prove irritating to the employees involved. Nothing in the final rules would sanction such abuse. But it must be asked what the real concern of employees is. Is it that employees may be asked to provide breath or urine samples? This would appear to be a fairly mild form of harassment, compared to leaving a crew waiting for transportation for several hours after the expiration of their statutory duty period, or requiring a road crew to yard its train in contravention of an agreement, or punishing an employee severely for a technical violation of one of the literally hundreds of rules contained in carrier rule books—all of which, and more, are available to the (alleged) unscrupulous supervisor.

FRA believes that the answer to this question is the one given by one of the employee witnesses cited above, who indicated that the big difference between current tools available for harassment and the proposed testing authority related to the finality of the sanction. The employee indicated a particular concern that drug use during a vacation might be detected by a urine test, resulting in dismissal. However, the employee agreed that, if adequate notice and opportunity for treatment were provided, it would not be unreasonable for the railroad to maintain such a policy. This suggests that at least some labor opposition relates to the potential for detection of alcohol or drug use (albeit potentially on a selective basis), rather than the subjective discomfort associated with tests that prove negative.

Indeed, much of the labor testimony before FRA was characterized by this same apparent ambivalence. Labor spokesmen said Rule G was a good rule and clearly wanted to get alcohol and drugs off of the railroad. At the same time, they tended to resist the very measures that could be most effective (from an enforcement standpoint) in accomplishing this end. FRA does understand the apparent concern of labor that an overzealous management might undertake frequent use of testing authority without adequate consideration of the manner in which those who test positive will be handled. However, FRA rates this possibility as extremely unlikely. Sound business judgment, public policy, and arbitral law

will conspire to prevent any such outcome.

Numerical limitations. The proposed rule contained a limitation of one test procedure in any day, two tests per month or three in any year. These arbitrary limitations were intended to respond to the apparent concerns of employees regarding excessive use of the proposed authority. Almost all labor participants in the rulemaking ignored this provision and continued to contend that the rule, as proposed, created the potential for harassment. On the other hand, the railroads offered a number of persuasive arguments for its deletion.

FRA has concluded that arbitrary numerical limitations on testing are not necessary, would involve significant record keeping costs, and would face significant implementation problems, without providing the intended reassurance to employees. Therefore, the provision has been deleted. It should be noted, however, that this decision provides no license for testing without cause. Section 219.9 continues to make unlawful any requirement that an employee submit to testing in reliance upon this rule without observance of the conditions and safeguards provided in the rule. FRA has authority to address such situations, should they arise.

Authorization vs. mandate. FRA has chosen to implement a limited, categorical authorization for the railroads to undertake compulsory breath and urine testing. No commenter suggested, and the final rule does not mandate, that such tests be conducted in every case, or even that a railroad make use of the authority conferred. This approach has been chosen in light of the hard, practical realities of railroading and the likelihood that the need for such testing will vary from location to location and over time.

It would not be feasible to require the railroads to conduct breath or urine testing in each of the situations where testing might, on a categorical basis, be indicated. The cost would be prohibitive, and in certain locations on certain railroads the benefits would likely be negligible. By contrast, at other times and locations, this testing authority will likely prove essential because other approaches will fall short.

An authorization for testing permits the railroad to balance use of this tool with the range of additional tools available to foster rules compliance, including intensive prevention programs, employee participation, effective use of periodic physical examinations, supervisory observations, and the like. As strides are made in controlling alcohol and drug use, enforcement can

be further restrained in the interest of economy and efficiency.

Approach of the final rule. The final rule contains numerous revisions responsive to concerns expressed in the public comments. In general, FRA has attempted to frame a testing authority that is available where there is reasonable cause to question the fitness of an employee engaged in a safety-sensitive function. Clearly, it will seldom be possible for supervisors to determine with certainty that employees are impaired by alcohol or drugs. But supervisors can observe performance and judge whether it is up to standard. Indeed, that is what they are trained to do. Further, in some cases supervisors will reasonably suspect drug or alcohol impairment. FRA believes that focusing the use of breath or urine testing on these kinds of situations meets the tests of fairness and effectiveness.

FRA has not adopted the AAR suggestion that the railroads be authorized to compel testing where an employee is reported to have consumed alcoholic beverages prior to duty or while on duty. Obviously, if the supervisor or another willing witness observes such conduct, it would provide a basis for discipline under Rule G (if the employee was on duty or "subject to duty"). FRA does not believe that testing based on third party observations is warranted, since such an approach could encourage unreliable reports from sources that may have collateral reasons for seeking to have the employee tested.

Of course, if a supervisor is motivated to observe an employee based on such a report, and the observation provides an independent basis for testing, then the test would be within the scope of the authority conferred.

Section 219.301 addresses the situations in which a railroad may require an employee to participate in breath or urine testing. *Paragraph (a)* states that cooperation in testing may be made a condition of employment in covered service. This provision does not create a Federal disqualification for failure to cooperate in an authorized breath or urine test, but merely removes any impediment to the railroad's enforcing such a condition. In particular, the regulation supersedes any provision of a collective bargaining agreement, or arbitration award constraining such an agreement, and preempts any State law limiting the ability of an employer to require testing.

This does not mean that a railroad may not enter into collective bargaining agreements relating to conditions under which tests may be conducted. The railroad may do so and is free to

observe, as a matter of practice, any constraints contemplated by the agreement, so long as the railroad is not inhibited from effective enforcement of these regulations. However, the railroad may not divest itself of the authority conferred by this section nor negate the consent required by section 219.11. The authority conferred here is conferred for the purpose of promoting the public safety, and a railroad may not shackle itself in a way inconsistent with its duty to promote the public safety.

The provision also states that Subpart D applies only when, and to the extent that, the test in question is conducted in reliance upon § 291.301. An example will illustrate this point. A railroad could enter into an agreement with its employees under which it could conduct random testing of employees. Employee representatives might insist, in exchange, that the railroad handle all first offenders under a suspension policy with requirement of treatment for those who need it. Such an arrangement, if effective in preventing violations of these regulations, would be unexceptionable from the point of view of the regulations. Further, the tests conducted under the agreement would not be subject to this Subpart, since they were not conducted in reliance upon it.

The more obvious example is the case of the employee who is requested to participate in testing but is affirmatively advised that he is not required to do so. Although the railroad might elect to follow common procedures for such voluntary test and tests authorized by this final rule, it would not be required to do so by the regulations.

In short, the objective of Subpart D is not to regulate the conduct of breath and urine tests by railroads, as such. Rather, the objective is to provide a detection and deterrence capability in the interest of safety, accompanied by such conditions as may be necessary to ensure fairness and effectiveness and to promote employee respect for the Federal safety regulatory program. The fact that a railroad may be at liberty to conduct other breath or body fluid testing does not mean either that such testing is "authorized" by the regulations or that the conditions imposed by the regulations would apply.

Paragraph (b) outlines the circumstances under which compulsory breath testing is authorized. First, testing is authorized where the supervisor has a reasonable suspicion that the employee is currently under the influence of or impaired by alcohol (or alcohol in combination with a drug), based upon specific, personal observations that the supervisor can articulate concerning the appearance,

behavior, speech or body odor (including breath odor) of the employee. The common experience possessed by virtually all railroad supervisors will clearly be sufficient to inform this kind of judgment in the cases where the signs of drinking are manifest. Obviously, not every reasonable suspicion will be vindicated by a positive breath test. An employee may be perceived to have slurred speech or unresponsive pupils for reasons other than alcohol. Indeed, a person under the influence of a depressant drug may display signs similar to those found with alcohol intoxication. However, the breath test can indicate quickly whether alcohol use should be treated as confirmed or excluded, and the supervisor can determine whether further inquiry (such as medical attention or a urine test) is required.

FRA has considered requiring observation by a second supervisor as a predicate for breath testing, but believes it would be impractical, particularly in operating territories with long distances between terminals and during early morning hours—precisely the conditions under which greatest vigilance may be required. Requiring a second observation under certain stated conditions has also been considered. However, any formulation of such conditions is likely to foster protracted disputes over whether calling a second supervisor may have been "feasible" or "practical." Breath testing is a quick and non-invasive procedure that can be accomplished with little or no disruption of the normal work day and little or no loss in efficiency. Imposing more extensive conditions will discourage its intelligent use without vindicating any substantial or legitimate employee interest not already protected under the rule.

Second, testing is authorized after a reportable accident or incident where the supervisor has a reasonable suspicion that the employee's performance contributed to the occurrence of severity of the event. This test is more strict than the test found in the NPRM because it limits the events authorizing testing to those that may have involved a human factor as the cause (or a contributing cause) and restricts the persons tested to those who are suspected of being responsible for that failure. While there is no better indication of inadequate performance than the fact that such performance produces property damage or an injury, it frequently is not possible to determine the genesis of an accident in its immediate aftermath. Again, the latitude should be present to require that testing

be conducted where there is a reasonable suspicion that a failure by a particular individual was responsible.

Third, testing is authorized where the employee has been involved in a rule violation of the kind specified. The final rule departs from the NPRM principally by the deletion of the provision contained at § 218.109(b)(1)(iii)(F). That provision authorized testing after a "violation of any other operating rule, bulletin order, or other written directive of the kind which directly affects safe movement of a train, switching movement or light engine in a way that could result in a train accident. . . ." This proposal was obviously a broad one, and FRA was concerned that it might be interpreted too broadly. During the public comment cycle, FRA invited witnesses to provide more specific language to address the variety of rule violations that might warrant use of the testing authority. Although several commenters criticized the provision, none offered substitute language. Accordingly, FRA has, through review of accident data and application of its experience in safety regulation, crafted a more complete enumeration of specific unsafe practices that warrant testing. Each of these practices involves the potential for a serious train accident or grave personal injury, or both. More significantly, each is an objective event and a clear indication of a material deviation from safe practice suggesting the real possibility that the employee is not fit. The quoted provision has been deleted.

In the place of the proposed provision, FRA has included a limited number of additional items that were subsumed in the broader statement. Paragraph (b)(3)(i) lists violations of train orders, signal indications and similar guidance that, very simply stated, involve a train being in the wrong place. Train separation is crucial to safety on the railroad because stopping distances very commonly exceed the sight distance ahead. Paragraph (b)(3)(v) deals with the failure to apply or stop short of a derail. Derailing devices are necessary safety devices that are often applied on industrial sidings and other auxiliary tracks near the point where they enter a main line. If a crew fails to fix a derail after placing cars at the industry, the failure of hand brakes, careless handling at the industry, or vandalism can result in the cars rolling free and striking a train on the main line. Failure to stop short of a derail can, of course, result in derailment of the train or switching movement itself (but may not, in a particular case, produce sufficient damage to make it a

reportable accident). Either action is indicative of human failure. Paragraph (b)(3)(vi) deals with failure to set hand brakes on detached cuts of cars. Such failures are responsible for significant numbers of accidents/incidents each year. Paragraph (b)(3)(vii) is included to address performance failures by dispatchers and block operators who control train movements by issuance of train orders, manipulation of traffic control (signal) systems, or by manual operation of signals. Many such errors are discovered before they result in collisions or other serious consequences. Others are not. This provision is intended to operate only where the railroad has imposed a specific duty on the employee performing the functions and the employee is clearly acting in a manner inconsistent with that duty and applicable railroad rules and instructions.

Another controversial element of the proposed rule was the provision that authorized testing only if a crew exceeded the authorized speed by at least ten (10) miles per hour. It was suggested that such a provision would send a message to employees that speed limitations may be exceeded with impunity. FRA obviously had no such intention. Observance of speed limitations is crucial to safety. However, it is not every overspeed operation that is indicative of a potential fitness problem on the part of the crew operating the train. Situations do exist in which experienced engineers may vary from posted speed, particularly on undulating terrain during the early portion of a run, as the engineer learns the feel of the particular train. These problems may be accentuated if the railroad assigns insufficient power to the train, or if a locomotive unit ceases to function en route. Although FRA does not sanction overspeed operation (particularly at any speed in excess of those permitted by track condition or signal protection), it must be recognized that some overspeeds are often attributable to factors other than the performance of the train or engine crew. Therefore, FRA has retained the speed provision in paragraph (b)(3)(iii) but has modified it in response to the comments. The final provision permits testing in the case of any overspeed operation of ten (10) miles per hour or more over authorized speed, or fifty (50) percent over authorized speed, whichever is less. FRA believes that this standard provides a reasonable basis for the exercise of judgment while avoiding the extremely complex formulations that would be necessary to anticipate all operating contingencies.

Paragraph (c) governs the circumstances under which urine tests may be required. In general, the same conditions that warrant breath testing also warrant urine testing. Tests may be required after accidents/incidents and rule violations under the conditions prescribed for breath testing. Analysis of urine can detect both alcohol and drug use and provides some degree of quantitation with respect to alcohol. Therefore, in these situations limiting the railroad to a single type of test is not indicated.

Urine testing on reasonable suspicion presents a somewhat more complicated problem. The final rule provision does authorize compulsory urine testing for suspected alcohol and/or drug impairment. Again, the supervisor must base the requirement on specific, personal observations. However, in the case of "reasonable suspicion" urine testing, two further conditions apply. First, such a test may not be required unless two supervisors concur in the judgment (the initiating supervisor and a second supervisor) that testing is indicated. Second, if the determination is based on a suspicion that the employee is impaired by a drug (rather than alcohol), at least one of the supervisors making such determination must have received at least three (3) hours of training in the signs of drug intoxication consistent with a program of instruction on file with FRA under Part 217. The program must provide information on the effects of the major drug groups on the controlled substances list. Such training is necessary in order to provide a foundation for reasonable judgments with respect to urine testing.

Paragraph (d) states that breath testing is the preferred method of testing when only alcohol impairment is suspected. The railroad is required to use a breath test in such a case unless doing so would not be feasible. Breath tests provide a more accurate reflection of current blood alcohol levels than is possible with urine. The provision is intended to provide guidance and govern the conduct of railroads within reasonable parameters. It is not intended to provide the basis for rejecting urine test results in any disciplinary proceeding.

Paragraph (e) states that compulsory urine tests may not be required in any case subject to mandatory testing under Subpart C (post-accident toxicological testing). The railroad may require employees to submit to breath tests on the scene of the accident or incident if conduct of the tests does not materially impede the collection of samples under

Subpart C. FRA believes that, as a general matter, testing after accidents/incidents subject to mandatory testing should be limited to collection of samples for analysis by FRA, limiting burdens on employees and ensuring that samples received for analysis by CAMI are of adequate quantity. However, conduct of breath tests at the scene of the accident/incident may be warranted to avoid the loss of evidence if, as will sometimes be the case, delays in obtaining FRA samples are likely to ensue on account of transportation time and administrative preparation at the medical facility. Such tests may also assist in sharpening the focus of the accident/incident investigation and assist in obtaining other evidence before it becomes stale or responses become formalized or rehearsed.

Paragraph (f) limits the time within which breath or urine testing may be done. In no case may a test be required more than eight (8) hours after the observation or event giving rise to reasonable cause. Ordinarily, of course, such tests should be conducted immediately. However, the exigencies of railroad operations, injuries sustained in accidents/incidents and other factors may make testing difficult in certain settings. The NPRM proposed a 12-hour limitation. Despite the dearth of comments going to this point, FRA believes that an 8-hour limitation is more appropriate.

FRA is familiar with the difficulty associated with estimating previous alcohol and drug levels from specimens obtained some time later. In view of these difficulties, a given sample taken more than an hour or two after an event or observation (specifically including a urine test accompanied by the optional blood test) could be essentially meaningless (depending on the substance, time of last dosage, etc.)—at least in the absence of clear behavioral evidence. In other situations, however, meaningful data may be obtained. For instance an employee who is detected with alcohol on his breath early in his duty tour and who tests at .03 percent some hours later can be shown to have achieved a BAC well in excess of the *per se* limitation contained in this final rule.

Paragraph (g) is intended to allay the fears of some railroads that the availability of testing authority will somehow affect the ability of the railroads to proceed with Rule G disciplinary actions in the absence of such tests. The availability of testing authority may not be construed to limit the use, or question the sufficiency of, other evidence.

However, FRA notes that some railroads do pursue a policy of providing the opportunity for a blood test or other test when an employee is charged with an offense under Rule G. FRA views this as good practice.

Section 219.303 sets forth procedures and safeguards for breath tests. Paragraph (a)(1) states that the devices themselves must be selected from among those listed on the National Highway Traffic Safety Administration (NHTSA) Conforming Products List. NHTSA maintains this list based on rigorous laboratory testing of the devices to determine if they meet strict performance standards. The most recent publication of this listing (and the performance standards) was in the Federal Register of December 14, 1984 (49 FR 48854-48864).

Paragraph (a)(2) requires that each device be properly maintained and calibrated with a calibrating unit on the NHTSA Conforming Products List of Calibrating Units for Breath Alcohol Testers (49 FR 48865-48872; Dec. 14, 1984). Calibration must be effected with sufficient frequency to ensure that the device is accurate within the normal range for use of such devices (plus or minus .01 percent of true value), but not less frequently than provided in the manufacturer's instructions. The frequency with which calibration should be effected depends on the type of device and frequency of use. The Field Manual will contain good practice recommendations for calibration of the testing devices.

Paragraph (a)(3) requires that tests be conducted by a trained and qualified operator. The railroad is required to submit its training program to FRA in conjunction with its filing under § 217.11. The training program must include training in the operation of the particular device(s) selected by the railroad and must include practical experience in operation of the device and use of the calibrating unit. It is the responsibility of the railroads to qualify operators for the devices.

Paragraph (a)(4) deals with conduct of the tests themselves. In general, the procedure for the test will depend on the type of device.

Paragraph (a)(5) requires that any test that is positive be replicated. In order to avoid a false positive or artificially elevated reading associated with alcohol in the mouth, a waiting period of at least 15 minutes must be observed before the replicate test. FRA has reduced this interval from the 20 minutes proposed in the NPRM because the shorter period is fully adequate to

ensure that the mouth will be purged of alcohol.

Paragraph (b) provides that an indicated reading of less than .02 percent shall be deemed a negative test. In response to the NPRM, several railroad commenters criticized FRA's stated reason for this provision, i.e., that BACs below .02 are *de minimis* for safety purposes. FRA recognizes the validity of this criticism, particularly in relation to rising and falling BACs. However, in reviewing whether the below-.02 provision should be deleted, FRA had to consider the state of existing technology, keeping in mind that there have not been frequent forensic applications of breath test readings in this very low range. Based on the capabilities of existing devices, FRA believes that the requirement to treat indicated readings of less than .02 as negative should be retained in the final rule.

This decision is no way excuses or immunizes BAC levels below .02. The railroads may still take any action within their discretion where other evidence is available to establish alcohol use. Obviously, a "negative" breath alcohol test will have no significance for the railroad disciplinary proceeding, except to establish that there was no detection of alcohol at or above the .02 percent level.

Paragraph (c) states that in any case where a breath test is intended for use in the railroad disciplinary process and the result is positive, the employee shall be given the prompt opportunity to provide a blood sample at an independent medical facility for analysis by a competent independent laboratory (a laboratory not owned or operated by the railroad). The purpose of this provision is to avoid any possible situation in which a poor test procedure or a manipulated test procedure might give rise to a false positive test. A fair process will foster employee confidence in the system. Obviously, it will not be in the interest of the impaired employee to provide a blood sample, since that result will merely tend to provide further documentation. FRA believes that the railroads will administer testing programs in a competent manner and this option on the part of the employee will seldom be used.

Paragraph (d) deals with screening test, in contrast to paragraph (a), which sets out conditions for all other tests under this authority. In order to make efficient use of increasingly inexpensive and compact testing devices, the railroads may wish to make them available to supervisors for use under less than ideal conditions. Some of the

devices currently being manufactured can be used with reasonable reliability by following simple directions. Although BAC readings may not be precisely on the mark if the device has not been recently calibrated, the device can indicate presence or absence of alcohol.

In some cases it may be in the interest of both the supervisor and the employee to perform a preliminary screening test (under the circumstances authorized under section 219.301) rather than transporting the employee to a place where a qualified operator is located with a currently calibrated device and reference standard (calibrating device) for routine quality checks. If the preliminary test is negative, the employee can continue the assignment without interruption. If the test is positive, the supervisor can then take the employee to a place where a follow-up test can be conducted. This procedure is similar to the use of preliminary breath test devices on the highways of some States (albeit with none of the potential for eventual criminal sanctions). By "removal from covered service," FRA means to refer only to the temporary suspension of the employee's assignment. Whether the employee remains in pay status is a matter for determination under the collective bargaining agreements. (Without questions, the employee would be entitled to any lost wages if the screening test is shown to have indicated the presence of alcohol when none was, in fact, present.)

FRA believes it would be useless to impose extensive restrictions on a preliminary screening test. The business of the railroads is moving freight and passengers, and any unnecessary interruption in crew performance means a loss of time and money. Considerations of efficiency will compel the railroad to maintain devices in good working order. In any case, the employee is entitled to have an evidentiary-quality breath test before the employee could be subject to discipline.

Note that the below-.02 provision applies to any screening test. A reading of less than .02 percent will end the procedure. Further, the fact that the railroad must provide an evidentiary-quality test in order to obtain a useable reading does not in any way affect the employee's right to demand a blood test.

Section 219.305 prescribes procedures and safeguards for urine tests.

Paragraph (a) provides that urine shall be collected at an independent medical facility under the supervision of employees of that facility. This approach will avoid objections concerning observation by a railroad supervisor.

The rule does not require observation of sample collection, but observation is the most effective means of ensuring that the sample is that of the employee and has not been diluted. If collection is observed, only personnel of the medical facility should be present.

Paragraph (b) requires procedures to ensure positive identification of each sample and accurate reporting of results. There are a variety of ways to accomplish this end, including regularized procedures and chain of custody documentation.

Paragraph (c) states that a urine test procedure may include the provision of not more than two samples from the same employee. Two samples (separated by 20 or more minutes) may be desirable to better estimate on-duty blood alcohol concentration, particularly for an employee who has just reported for duty. Similarly, in the case of suspected drug use, obtaining a second sample several hours after the event may help in determining recency of use (depending on the time of collection of the first sample, the particular drug, and other factors). FRA believes that use of this authority will be appropriately selective.

Paragraph (d) secures the right of the employee to demand a blood test in any case where a urine test is required. The purpose of this option in relation to the urine test is significantly different from the same provision with respect to the breath test. The employee's interest in the neutrality of the urine test is already established by virtue of the situs of the collection and use of an independent laboratory. Here the employee is assured that, if the option is exercised, that a more complete factual record will be developed regarding the extent and timing of the employee's drug use.

As further discussed below (section 219.309), the employee who has not abused drugs will have no reason to fear a urine test and can assume that the report (which may take several days) will be negative. Similarly, the employee who has made an appropriate medical use of a drug, as authorized by a physician (and who, if required by the railroad, has notified the railroad of such use or obtained approval), will have nothing to fear—and no reason to claim a blood test. However, the drug abuser will know that the test will be positive. The abuser will likely claim the right to a blood test in order to produce a more precise record on the levels at which the drug is present and recency of use.

Paragraph (e) states that nothing in Subpart D restricts any discretion available to the railroad to request or require additional body fluid testing.

That is, while Subpart D does not confer additional authority, it does not stand in the way of the exercise of any such authority.

Section 219.307 lays down standards for urine tests or "assays." Paragraph (a) provides that the independent laboratory must be proficient in analyzing urine for drugs of abuse. A laboratory that performs confirmatory procedures (discussed below) is required to be a participant in an external quality control program. Such programs are essential to avoid inter-laboratory variations and to detect deviations from sound technical practice. This requirement is particularly critical in view of the fact that there is no general-purpose certification program at either the Federal or State level for laboratories undertaking this work (although certain laboratories may be certified or approved by certain clients or for particular purposes).

Paragraph (b) provides that each sample shall be initially analyzed by a method that is reliable within known tolerances. Immunoassay techniques have been developed over the past few years that are very sensitive and reasonably specific for a variety of drugs of abuse. As a practical matter most laboratories will use these tests for initial screening (though no particular technique is required).

However, screening tests generally carry the potential for a known percentage of "false positive" results. In some cases it appears that these false positives are genuine—no drug is present. In other cases, confirmation may not be possible for a variety of reasons. In any event, scientific opinion seems well settled that where important economic or legal consequences flow from a test result, confirmation by another method is essential.

The rule requires confirmation by a method specific to the substance detected in the initial screen. The result must be quantitative. The regulation says that an immunoassay (including a radio immunoassay) is not an acceptable confirmatory test. This statement should not be construed as in any way derogatory, since these assays have a legitimate and useful role in the testing process.

FRA heard testimony that confirmation by gas chromatography/mass spectrometry (GC/MS) is the current state of the art with respect to confirmation of drugs of abuse. FRA agrees that this is generally the case. See, e.g., *GC/MS Assays for Abused Drugs in Body Fluids*, Research Monograph Series No. 32 (National Institute on Drug Abuse 1980). GC/MS

confirmation by a competent laboratory using an appropriate technique will provide an extremely high level of confidence in the test result. Indeed, CAMI will be using GC/MS assays to confirm and quantitate drugs found in blood and urine in the course of the post-accident testing program. FRA has not specifically required GC/MS confirmation in every case under this section because such a requirement would tend to usurp the role of the scientific community in establishing the reliability of existing assays and development of new assays. A confirmatory test is acceptable under the regulation if it meets the test of specificity.

Paragraph (c) requires that laboratory reports provide enough information so that they can be reviewed and evaluated by (or on behalf of) persons representing an employee in any disciplinary action or arbitration. Most laboratory reports are notably deficient in this respect. The laboratory is required to report as negative any positive screen that cannot be confirmed. Although FRA may not regulate the laboratories, it can insist that the railroads use their market power as consumers of services to ensure these procedures are followed. A legible copy of the laboratory report must be made available to the employee.

Section 219.309 relates to the presumption of impairment from a positive urine test. If an employee's urine sample has tested positive for a controlled substance (or its metabolites) and the employee was afforded the opportunity to have a blood test, but declined to do so, then the finder of fact in a disciplinary case may presume from the presence of the substance that the employee was impaired within the meaning of § 219.101. The presumption is permissive and rebuttable.

This presumption is no mere afterthought. An understanding of this provision is crucial to an understanding of the urine testing authority. The reader must keep in mind that a "urine test" is actually a series of procedures involving the least two separate assays (screening and confirmation) that takes place over a period of several days. Thus, at the time the employee presents a sample, the report of the test is not immediately available. (Portable testing kits for on-site testing are available, but this rule does not contemplate use of this relatively new and technically limited approach.)

The second point that must be remembered is that a urine sample, by itself, will almost never, if ever, be sufficient to establish that the employee

was impaired at the time of collection (let alone at the time the decision to test was made). Urine is sufficient to establish that a drug has been used by the subject, but because most drugs are eliminated from the body over a period of hours, days, or even several months, urine levels are only rough indicators regarding recency of use. (This problem is particularly acute with respect to marijuana, the drug of abuse that is statistically most prevalent.)

Why, then, is urine selected for testing? It is selected because it can be obtained with no discomfort to the employee and no invasion of the body. It is an excellent fluid for screening purposes and can clearly indicate whether the person in question is using one or more controlled substances. It is also the best choice among the alternatives.

Breath is not presently a useful sample for detecting drugs other than alcohol, although there is some potential for its use in detecting certain drugs. Saliva also has promise as a fluid for evaluating recency of use for marijuana, but both the research and experience in practical application are presently so limited as to make it useful only for preliminary screening. Its potential for other applications is not known. Other samples are clearly not available from the surviving subject.

Blood was disfavored for several reasons. First, even if blood were to be routinely obtained on reasonable cause, it would be desirable to obtain urine, as well, because of its utility as a screening medium and its "memory" of substances that may be found in the blood at only very low levels (at the time the blood sample is drawn). That is, urine results can be used to guide work on the blood sample. Second, drawing blood is invasive. Effective detection of drug use on the railroads will be possible only if the testing authority can be employed with respect to a wide variety of human failures. FRA is reluctant to require blood tests on so wide a scale, even though it might be possible to do so.

In FRA's view, employees should be required to provide blood only where no reasonable alternative exists. Post-accident toxicological testing is obviously such a case. Requiring the provision of a blood sample is also reasonable where (1) it is reasonably suspected that the employee presents a safety risk or has contributed to an unsafe act and (2) it is known that the employee uses drugs of abuse without legal or medical authorization. This is what the presumption effectively accomplishes.

Though formally a substantive presumption, in operation the

presumption is a *procedural* presumption that is intended to shift to the drug abuser the burden of producing the best physical evidence (venous blood) bearing on that employee's fitness. Note the selective effect of the presumption:

1. The employee who does not abuse drugs can expect to have a negative urine test and will neither be burdened by the presumption nor required to provide blood.

2. The employee who has abused drugs and carries acute effects into the workplace will probably elect not to provide blood but will justly suffer the consequences of the presumption.

3. The employee who abuses drugs but believes he or she is blameless with respect to any current acute effects of the drug will elect to provide blood and will be judged on the best evidence available—i.e., the presumption will have no effect.

Is it reasonable to require the drug abuser to submit to blood testing in order to be judged on the best evidence available? FRA believes that the answer to this question is obvious from the context. Railroad employees have elected to work in an industry that presents inherent hazards to the worker and the public alike. That peril is controlled, with great effectiveness in most cases, by the careful observance of safety rules and instructions, as well as by costly safety systems. Distribution of drugs on the controlled substances list is tightly controlled, and in the case of Schedule I drugs effectively prohibited, because those drugs have serious adverse health effects and varying dependency potentials. The drug abuser is self-selected as a member of a population that presents a higher risk to safety than those who are not members of that population. Therefore, FRA has no reluctance whatsoever in making the judgment that the presumption of impairment from urine, coupled with the option for a blood test, is an eminently fair method to approach detection of drug use.

Use of the presumption also greatly limits the need to obtain blood from non-abusers in the variety of situations where fitness is at issue but alcohol and drugs may not be, in fact, at the root of the performance failure. It provides the alternative to a requirement for both blood and urine.

Paragraph (b) complements and effectuates the presumption. Railroads that elect to employ urine testing authority are required to provide effective notice to their employees of the right to a blood test and the effect that will be given to the presumption if that

right is not claimed. The paragraph does not require ritualized notice each time a urine test is required, although some railroads will find that this is a convenient means of providing notice. However, a railroad can satisfy this requirement by including a statement similar to the one suggested in paragraph (b)(2) in its book of rules or other reference source with which employees are required to be familiar. FRA has no doubt that, once published, the blood test option and the presumption will become well known among those who abuse drugs, particularly those who use illicit substances.

FRA has deleted from the presumption the words "material quantity of" modifying "drug" (controlled substance) at the suggestion of commenters. This phrase was intended to refer to acceptable detection levels for the purpose of screening out false positive results, but FRA agrees that it would be subject to misinterpretation. The provisions of § 219.305 will adequately deal with this problem. FRA has also deleted alcohol from the operation of the presumption, since its inclusion cannot be justified by reference to the line of reasoning set forth above and the railroad will have available to it breath testing authority that can be employed to obtain a reliable blood alcohol reading.

Paragraph (b)(3) says that a railroad which has a policy forbidding off-the-job use of drugs must include in the notice required by paragraph (b)(2) a statement concerning any additional consequences of a positive urine test. FRA can neither restrain nor authorize disciplinary action where full toxicology reports, in concert with other evidence, indicate abuse of controlled substances but fail to establish any direct and immediate relationship to job performance. FRA believes that the railroads will follow a measured and appropriate course in dealing with this problem.

Fact finding. FRA does not Federalize railroad disciplinary proceedings through this rule. Such an intrusion is not required, nor would it be prudent. FRA notes that it disagrees with comments suggesting major deficiencies in the procedures provided for in collective bargaining agreements. Railroad investigations follow reasonably formal procedures and include written transcripts. If adjustment of a dispute is not accomplished on the railroad, arbitration is available under section 3 of the Railway Labor Act; and the neutral arbitrator is empowered to order back pay and other benefits. This

system has long been recognized by the Supreme Court as necessary and appropriate to the maintenance of labor peace on railroads engaged in interstate commerce. FRA sees no reason to disrupt this institutional structure in relation to ongoing railroad enforcement of Rule G.

4. Identification of Troubled Employees

a. Summary of Proposed Rule (§ 218.111)

The proposed rule would have required each railroad to adopt, publish and implement two policies designed to (i) identify for treatment those employees who need help with their alcohol and drug problems and (ii) elicit the assistance of all employees in enforcing restrictions on alcohol and drug use. FRA deemed these policies necessary to assist in preventing the job-related use of alcohol and drugs and thus promote safety.

Both policies were stated as minimum standards for railroad programs and were not intended to limit the discretion of the railroad to provide more humanitarian treatment, consistent with the railroad's responsibility to prevent accidents.

The term "EAP counselor" was defined in § 218.101(f) of the proposed rule and was used in the paragraphs describing both of the proposed policies (§ 218.111 (b), (c)). This term was intended to describe a person with appropriate qualifications who could evaluate employees' substance abuse problems, provide information on treatment resources and alternatives and—most critically—render judgments with respect to the fitness of recovering employees to return to covered service. It was not intended that the "EAP counselor" necessarily be a salaried employee of the railroad, but it was recognized that such person owed a duty to the railroad to evaluate the employee's condition.

The first policy was designed to promote voluntary referrals of troubled employees to employee assistance programs and similar mechanisms provided by the railroads. The policy would encourage troubled employees to seek help before they are involved in life-threatening situations by protecting the confidentiality of referrals, requiring that leaves of absence be provided for treatment, and providing that such employees be returned to service when they have achieved sufficient progress in recovery. The policy would not have required the railroad to provide treatment, since treatment must be provided by the health care community. Instead, the policy was intended to ensure that the employee is provided the

opportunity to seek treatment without endangering the employment relationship.

The second policy was designed on the model of the bypass agreements. It was intended to help dissolve the "conspiracy of silence" among employees concerning job-related alcohol and drug use. Historically, co-workers have been reluctant to report Rule G violations because the sanction for such violations is dismissal. The "co-worker report policy" was designed to provide co-workers with an alternative to working with an impaired employee. The policy provided that where a co-worker reported to the railroad that an employee was unsafe to work with, the railroad would evaluate the employee and determine if the employee was in violation of Rule G or the proposed Federal rules. If the employee was found in violation, he would be removed from service and given an option to contact the EAP counselor. If the employee contacted the counselor for assistance, disciplinary action would be held in abeyance (and eventually terminated). If the counselor found that the employee was not affected by a treatable condition of alcohol or drug dependence or abuse, the employee would be returned to service. Such an employee could be required to participate in an education and awareness program at the option of the railroad. If the employee was found to require treatment, the railroad would provide a leave of absence. The employee would be returned to service when the employee had achieved sufficient progress in recovery.

Both the voluntary referral and co-worker report policies contained one-time limitations. That is, the employing railroad would be required to provide the opportunity for treatment, or a bypass of discipline, on only one occasion per employee. An employee who had completed treatment voluntarily would not be eligible for a bypass of discipline after a co-worker report, nor would that employee who had elected the bypass be eligible for later voluntary treatment. These restrictions on the regulatory mandate would not limit the discretion of the railroad to provide more liberal treatment in appropriate cases or under standing policies or agreements.

The proposed rule contained a provision on construction (218.111(d)) that indicated the limitations of the mandate. The rule was not to be construed to (i) require payment of compensation for any period an employee was out of service, (ii) require the railroad to adhere to the prescribed

policy in a case where a referral or report was made for the purpose, or with the effect, of anticipating the imminent and probable detection of a rule violation by the railroad representative, or (iii) limit the railroad's ability to adopt any policy or agreement consistent with the minimum requirements of the proposed rule. The rule also provided that it did not limit the discretion of a railroad to dismiss or otherwise discipline an employee for (i) other rule violations or (ii) the commission of a criminal offense on railroad property or during duty hours.

b. Public Comment

The comments on § 218.111 presented many rich nuances of relative support and/or disapproval. NARUC offered support based on the consensus of its members. AMA also supported the rule. National labor representatives supported the proposed rule as a necessary adjunct to other rules (should they be adopted), but emphasized that employee assistance programs, peer referral systems, and bypass mechanisms could be fully effective only if implemented on a voluntary basis. A major freight railroad that has been an innovator with respect to voluntary programs also stressed the value of active employee involvement as represented by collectively bargained agreements and the establishment of employee committees.

A BLE local officer said that rules will destroy the "foundation of trust" between management and labor associated with an effective EAP and bypass agreement. But some of the other local BLE representatives participating in the rulemaking favored this section.

Two major railroads supported the section with AAR-recommended changes and (in one case) a further change noted below. One of these railroads emphasized that the proposal would be much less effective in the absence of strong discipline where management detects the violation. The railroad, a major freight carrier, said its statistics show that "dismissed employees" recover at a rate twice as high as voluntary referrals and have lower mortality rates. The railroad stressed that substance-dependent employees must be confronted with clear choices if they are to be assisted toward rehabilitation. Amtrak also supported the rule with qualifications noted below. A major freight railroad thought the section should be redrafted to be more general, so as not to inhibit the ability of the railroad to enter into agreements with its labor organizations covering the same subject matter.

EAP counselors/qualifications and roles. The question of who would make crucial decisions concerning adequacy of treatment resources and return-to-service elicited some comment. AMA thought that the "EAP counselor" should be a "psychiatrist or other qualified health professional." The RLEA said the rule should contain a minimum counselor training program administered by FRA, should require counselors to be certified, and should specify a minimum counselor/employee ratio.

The railroads' comments are discussed below.

Voluntary Referral Policy. This portion of the rule drew support from NARUC, AMA, NTSB, UTU, RLEA, Amtrak, two freight railroads and two commuter railroads. However, a major freight railroad made a specific point of its opposition.

Five railroads, including Amtrak, urged that return to service be conditioned on approval of the chief medical officer, as well as the "EAP counselor." A major railroad pointed out that alcohol and drug abuse can cause mental and physical disorders requiring separate evaluation.

Two major freight railroads offered revisions of the voluntary referral paragraph that would impose confidentiality even in the case of a supervisory referral.

RLEA urged that the final rule should contain a counselor training program sponsored by FRA. Under the program, counselors would be required to be certified and each railroad would have to conform to a minimum counselor/employee ratio.

One railroad stressed the importance of § 218.111(b)(6) of the proposed rule, which required that the employee report to the EAP counselor either during non-duty hours or while unimpaired and otherwise in compliance with the railroad's alcohol and drug rules.

Co-worker report policy. This element was specifically supported by NARUC, the New York Department of Transportation, NTSB, the major unions, and three passenger carriers. Two major freight railroads were also generally favorable to the proposal. A third favored the agreement approach but did not oppose a rule, while a fourth opposed any rule by indicated its willingness to consider execution of a bypass agreement. Another major freight railroad entered a formal "no objection." On the other side, five freight railroads and a commuter railroad offered more or less vigorous objections. One of them expressed the objection as based on the ground that supervisors

should act consistently as to all employees.

The national labor organizations (RLEA, BRS, UTU and BLE) argued that the bypass option should be available even after a (first offense) rule violation detected by management, a position not echoed by the railroad participants. BLE urged that this "universal bypass" was appropriate because of the fact that the so-called "conspiracy of silence" extends to the ranks of line supervisors, who know employees personally and are reluctant to take action that could endanger their livelihood. NTSB said it could not support the universal bypass concept. RLEA and BRS indicated that final rules should clarify the interrelationship between the policies required by regulation and bypass agreements in effect on some railroads.

A local UTU representative expressed concern that the co-worker report provision could be misused by malicious or mistaken employees.

One of the railroads disapproving the co-worker report or "limited bypass" described it as a "substantial, unwarranted intrusion into the rights of management to . . . adopt those policies that best serve their railroad." Another of the railroads objecting to the proposed policy said it already has a qualified bypass policy already in effect (involving suspension, rather than dismissal, of most first offenders). However, the railroad vehemently protested the inclusion of a right to bypass in Federal regulations. The railroad said that a "bypass" may not be appropriate with respect to particularly egregious violations indicating that the employee needs to experience severe consequences in order to set the stage for rehabilitation. The railroad also noted that its large EAP program gets only 4% of its referrals from employees and 8% from the labor organizations, in contrast to 24% from supervisors, despite what it regards as a liberal policy.

Another objecting railroad noted that the co-worker report would not, by definition, work in a second offense situation and "presupposes" that an employee who has been forced into a program can be successfully treated.

At least one commenter urged that the co-worker report policy apply only at the time the employee reports for duty and a second appeared to concur in that position. Otherwise, it was indicated, employees could circumvent normal discipline.

By contrast, the railroad objecting to the policy on the ground that the supervisor should act consistently as to all employees advocated a revision that

would permit an employee to voluntarily mark off without penalty (and report to a counselor within five days) if the employee had been persuaded to do so by a co-worker. The railroad thought that this approach would be superior to involvement of the supervisor. Another freight railroad suggested a similar "mark off" option in addition to the co-worker report as proposed.

Decision-making after co-worker reports. A major freight railroad thought the chief medical officer should control the initial evaluation of the employee to determine whether formal treatment is necessary, in consultation with the EAP counselor (a position consistent with the latitude provided by the proposed rule to designate "EAP counselors" from among the ranks of qualified persons).

A railroad commenter suggested that the employee be referred for treatment only if there was a "clinical dependency" based on "documented evidence." The commenter did not explain how this standard might differ from the one proposed or whether the language was offered for the purpose of simplicity or clarity.

Another major railroad chose to focus on return-to-service, indicating that a top-level supervisor should determine when the employee is ready to come back (with the benefit of the EAP counselor's recommendation), with the supervisor's decision to be evaluated on an "arbitrary or capricious" basis. A commuter railroad also thought that an employee should be returned only with the approval of the "department head," and a major freight railroad liked the term "designated company official." Another commuter railroad would have the chief medical officer serve as final arbiter.

Two major freight railroads would require completion of an education program as a condition of returning the volitional user to service.

Time periods. AAR expressed the concerns of the railroads with respect to the time periods contained in the proposed co-worker report policy. The proposal required the employee to report for evaluation within 5 days of being removed from service. If the employee was found not to require treatment, the employee would be required to be returned to service within 15 days (15 days after removal from service). If it was determined the employee needed treatment, a leave of absence of 45 days was to be granted (from date of evaluation). The railroads thought these time periods were excessively short.

AAR suggested that the 5-day period should operate only against the employee—as a requirement that the

employee step forward—and not against the railroad. AAR and other commenters noted that EAP counselors often have many clients and very busy schedules; and it was suggested that FRA cannot control their schedules by regulation. AAR and other commenters also suggested that the 15-day period begin to run after the evaluation is complete, since the evaluation might involve multiple interviews and a medical consultation. One railroad agreed that some of this could be speeded if more EAP counselors were available. A commuter railroad (perhaps misunderstanding FRA's intent) questioned the requirement that a 45-day leave of absence be granted for treatment. The commenter would have the decision made by the EAP counselor and department head. On the other side, RLEA apparently thought the 45-day period was mandatory as to any person requiring treatment; RLEA wanted the counselor to be able to return the employee to work more quickly in an appropriate case.

Follow-up testing/treatment. A major freight railroad urged modification of the rule to make explicit the ability of the railroad to require a recovering employee to submit to breath or body fluid testing to ensure the employee has not suffered a relapse. Amtrak wanted the EAP counselor to have the ability to require follow-up treatment for employees returned to service on completion of primary treatment.

Short lines. The American Short Line Railroad Association (ASLRA) cited the comment of one member road that it could not hold a position open while a person is being rehabilitated. The commenter said EAP counseling is generally available for employees on short lines, but not through salaried personnel. Adequate health insurance coverage is available to ensure treatment (as is the case with Class I and II railroads).

Construction. AAR and a major freight railroad objected to the scope of § 218.111(e)(2), which indicated that the proposed rule was not intended to limit the railroad's existing discretion to discipline employees for criminal conduct "on railroad property or during duty hours." The commenters thought the quoted phrase should be deleted, since the railroads reserve the right to discipline employees for certain types of off-duty conduct that may adversely reflect on the business reputation of the company or fitness of the employee.

c. Final Rule Provision (Subpart E)

The final rule includes the voluntary referral and co-worker report policies substantially as proposed, but with

important clarifying changes suggested by the commenters. Employees throughout the railroad industry are entitled to know that they will be able to seek help for their substance abuse problems without the threat of losing their jobs. Only if this is the case can we expect employees to step forward to get help before they pose a detected safety problem (or actually cause an accident or casualty). Co-workers of employees who bring their problems to work must be provided with the leverage to avoid working with unsafe employees without being responsible for their losing their employment. Achieving these objectives will directly benefit public safety, while providing an important means for employees to avoid the potentially harsh consequences that could flow from enhanced detection capabilities provided by this final rule.

Employee reservations. Employee representatives stressed that inclusion of these policies in Federal regulations will be less effective than active employee involvement in prevention activities including similar elements. FRA agrees that this may be the case, but does not view this as an "either/or" choice. FRA will continue to affirm and promote employee involvement in prevention activities. Securing minimum arrangements for assistance of employees who need help should in no way blunt the thrust for full employee involvement.

FRA has not adopted detailed qualifications for EAP counselors or a minimum counselor/employee ratio (concepts advanced by RLEA). The record of this rulemaking does not provide an adequate basis for such determinations, and these are issues better suited for action by the National Planning Committee.

Railroad objections. Most of objections from the railroad pertained to the co-worker report policy, which would soften the general rule that on-duty alcohol or drug use or impairment will result in discipline. The railroads did not effectively counter FRA's contention that this mechanism would encourage voluntary referrals, as well as providing for identification of Rule G violations that otherwise would not come to management's attention. However, they did raise important objections regarding whether the policy would be viewed as creating inconsistent treatment by supervisors or a precedent that could (in the railroads' view) further weaken Rule G.

FRA has considered the railroads' objections very carefully, but is persuaded that they do not carry sufficient weight to warrant forgoing the

benefits of the co-worker report policy. FRA believes that where bypass agreements have been implemented respect for Rule G has likely increased, rather than been diminished. While the rule will not involve collective labor involvement of the kind represented by an agreement, it will be based on the same concerns and operate in much the same manner. Obviously, should the provisions prove counterproductive, FRA would not hesitate to terminate its operation after appropriate notice and opportunity for comment. In the end, employees will determine whether it survives. If employees attempt to use the co-worker report as a device to immunize rule violators in anticipation of detection, it will have a short life. If, on the other hand, it is used as an important supplementary tool to ensure employee fitness and safety, it will enjoy the long life FRA expects and intends.

Section 219.401 contains the basis requirements for complying policies that will assist in identifying employees troubled by alcohol or drug dependencies and preventing alcohol and drug violations by other employees. The final rule provides the railroad with the option of following the minimum Federal standards for such policies (with whatever additional, consistent provisions the railroad desires) or obtaining employee approval of alternate arrangements directed toward the same end. This flexibility is intended to be responsive to the emergence of programs such as Operation Red Block that stress employee involvement coupled with formal agreements addressing of variety of contingencies, including some not addressed in these rules.

Paragraph (a) states the purpose of the subpart. Paragraph (b) requires the railroad to adopt, publish and implement complying policies. Paragraph (c) makes clear that this may be done by alternate means provided in the subpart. Paragraph (d) requires that policies implementing the Federal standards must be available to FRA for inspection and copying.

Paragraph (e) contains revised versions of certain cautions with respect to construction of the subpart. It should be noted that paragraph (e)(3) may not be used to excuse pretext discipline of an employee who has taken advantage of a voluntary referral or who has been identified by a co-worker report. For instance, a user of Schedule I controlled substances who turned himself in on a voluntary referral could not be dismissed for conduct unbecoming an employee or supposed criminal

possession solely because he admitted to illicit drug use. That would defeat the purpose of the provision. On the other hand, should the same employee be arrested for trafficking in illicit drugs or other notorious conduct affecting the reputation of the company, nothing in the rules would prevent the railroad from taking action based on that conduct (or sanction such action).

Section 219.403 describes minimum standards for voluntary referral policies. Paragraph (a) defines the scope of the section and indicates that railroads are free to implement more extensive policies consistent with the minimum standards.

Paragraph (b) provides the benchmarks for a voluntary referral policy. Such a policy protects the employment status of the employee who steps forward, or is referred by another employee (including a collective bargaining representative). The railroad may provide that certain referrals from supervisors will be handled under the policy, but this is not required. In general, the referral and subsequent treatment are handled on a confidential basis. This means, in part, that the employee's co-workers and supervisor will be told only that the employee is on leave of absence. If necessary to meet initial treatment needs, the railroad must grant a leave of absence. The 45-day period provided in the regulation is the minimum leave the railroad is required to afford if it is required for initial treatment. In consultation with a treatment provider and/or the railroad's medical officer, the EAP Counselor may determine that the employee needs no leave at all (but can be handled on an outpatient basis without interruption of employment), needs a leave of less than 45 days, or needs a leave of more than 45 days (in which case the railroad is encouraged to grant it, but is not required to grant any portion beyond 45 days).

The employee is returned to service on recommendation of the EAP Counselor, and approval may not be unreasonably withheld. The railroad may provide in its policy that the employee can return to work at any time, with or without EAP Counselor approval. (If the railroad does not provide for a waiver of confidentiality under paragraph (c) where the employee fails to complete initial treatment, the railroad is effectively required by its own formulation of the policy to return the employee to service on demand.)

Paragraph (c) notes certain provisions that may be adopted at the option of the railroad. The listing is not intended to be exclusive, but illustrative of the

concerns raised by the commenters. Paragraph (c)(1) says the policy may provide for a waiver of confidentiality where the employee refuses to cooperate in a recommended course of counseling or treatment or where the employee is involved in a subsequent rule violation involving use of alcohol or drugs (in which case the prior treatment might be relevant to the discipline assessed).

Paragraph (c)(2) provides that successful completion of a return-to-service medical examination may be required. As pointed out by the commenters, alcohol and drug abuse can produce other physical and mental conditions that may have to be treated before the employee can be restored to service with safety.

Paragraph (c)(3) permits the railroad to limit application of the policy to a single period of treatment and to exclude its application to an employee who has been afforded the opportunity for treatment under a co-worker report policy. Of course, a railroad could also limit treatment to once in any 5 or 10-year period or in any other way consistent with the section and its duty to prevent violations of section 219.101.

Paragraph (c)(4) permits the railroad to include a provision requiring that the employee report to the counselor while off duty or while unimpaired. The policy is not intended to shelter the job-related conduct of an employee who may fear imminent detection.

Section 219.405 deals with the co-worker report policy. Paragraph (a) defines its scope and notes that the railroad is free to provide more favorable treatment. Paragraph (b) states the basic protection for the employment relationship but limits it to first offense situations.

Paragraph (c) states generally applicable conditions and procedures. The rule operates when a co-worker calls attention to the condition of the employee. The supervisor then independently determines whether a Rule G violation has occurred. (If the supervisor has a reasonable suspicion of impairment based on personal observations, the supervisor may require a breath or urine test to confirm.) The offending employee is removed from service. In order to claim the benefit of the policy, the employee must elect to waive investigation the Rule G charge and must contact the EAP Counselor within a reasonable period specified by the policy. (The proposed rule contained a 5-day period; but a railroad might wish another period, taking into consideration the availability of the counselor and other factors.) In

any case, it is intended that the employee be free to contact the counselor immediately.

The counselor is required to see the employee and complete the evaluation within 10 calendar days of the date on which the employee makes initial contact. However, if further evaluation is required (e.g., by a treatment provider or medical officer of the railroad), the 10-day period may be extended by as much as an additional 10 days.

FRA recognizes the concerns of the railroads regarding availability of counselors and agrees that FRA cannot set their schedules. Accordingly, the time periods have been lengthened and somewhat extended. However, the basic point remains that the railroad has full control over counselor availability by virtue of the number of persons it employs (or contracts with) to perform that function. One of the great weaknesses of some existing employee assistance programs is the inadequacy of staffing. Current staffing problems on some railroads should not be an excuse for avoiding prompt handling under this policy.

It should also be noted that actual co-worker reports are not expected to be numerous. The policy will accomplish its purpose if it fosters voluntary referrals and deters alcohol and drug use by those capable of leaving these substances at home. When a *bona fide* co-worker report does occur, the railroad should make every possible effort to provide prompt and sound handling of that case, because it is by that experience that the good faith of the railroad will be judged in the minds of its employees.

Two railroads suggested that the "bypass" embodied in the policy either include, or be limited to, situations in which the offending employee is persuaded by co-workers to "mark off" voluntarily (and thereafter report to the counselor). FRA agrees that such an element could logically be included in a railroad's co-worker report policy; and nothing in the final rule inhibits a railroad from so acting. FRA has not required a voluntary mark off component because the co-worker report policy is mandatory and because FRA believes that there was not adequate discussion of this concept during the public comment cycle. Such a provision is arguably more susceptible to attempted abuse by the offending employee than the policy proposed by FRA, and its inclusion without full discussion appears not to be warranted.

Paragraph (d) describes the required procedure when the employee is determined to need treatment. Again, a leave of absence of up to 45 days must

be provided, if needed. In the case of some cases of alcohol or drug addiction, the railroad may wish to accommodate an even more extended course of treatment. The employee has to agree to treatment and successfully complete it. Obviously, it is intended that the required treatment be reasonable and appropriately responsive to the condition treated. But the EAP Counselor, on behalf of the railroad, is the judge of its adequacy.

The employee is returned to service on recommendation of the EAP Counselor and, if desired, after successful completion of a medical examination. Approval to return to service may not be unreasonably withheld.

Follow-up treatment may be required for not to exceed two years. This provision was included in response to the comments and in recognition of the fact that the EAP Counselor will be encouraged to return the employee to service if it is known that the employee will be continuing in treatment. Alcohol and drug dependencies, in particular, require continuous treatment, in some cases for the duration of the alcoholic's or addict's lifetime. The two-year period is selected because it is a generally-accepted minimum time for effective follow-up in the treatment community.

Paragraph (e) deals with the employee who is determined not to require treatment. It provides that the employee shall be returned to service within 5 days after completion of the evaluation. The railroad may require the employee to participate in a program of education and training concerning the effects of alcohol and drugs on occupational or transportation safety.

FRA did receive comments suggesting that such training be made mandatory on the railroads. FRA believes that education and awareness efforts directed at the rule violator can be helpful in preventing future non-compliance. However, there is no documented record to establish the marginal usefulness of such efforts, and FRA does not believe it is appropriate to mandate this expenditure of time and resources at this time.

Section 219.407 provides for satisfaction of the railroad's obligation through adoption of alternate policies having the concurrence of employee representatives. The concurrence must be explicit and in writing. Any alternate policy must be filed with FRA, and advance notice must be provided of any amendment or revocation.

FRA recognizes that this provision may produce a quilt effect, with certain crafts subject to policies meeting the minimum Federal standards and others

subject to special arrangements. Indeed, a single craft on a railroad could be subject to a policy under section 219.403 and a bypass agreement substituting for the policy described in section 219.405. However, FRA is not willing to take any action at this stage in the evolution of approaches to the substance abuse problem that would unnecessarily chill or choke off innovation. The industry, labor and management, should be free to develop new approaches and test them in the laboratory of everyday life.

Note on the "EAP Counselor." As discussed above, the term "EAP Counselor" is defined in section 219.5. The "EAP Counselor" is actually a function, rather than an identified person. But the rules do require that the function be performed by a person or persons qualified in relation to the demands of that function. The term "EAP Counselor" is chosen because it will be recognized by many employees of the railroads and evokes the professionalism and concern for employee welfare which the employee assistance programs represent. Use of the term in no way restricts a railroad from assigning evaluation or counseling or follow-up monitoring in any way that is responsible. For instance, a railroad that employs recovered alcoholics to evaluate and counsel persons suspected of having alcohol dependencies might elect to have a qualified medical officer handle a similar function with respect to employees affected by abuse of other drugs (or provide its alcoholism counselors with training in other substance abuse problems).

FRA has not adopted the suggestion of the AMA that the "EAP Counselor" be required to be a psychiatrist or other health professional. Persons from a variety of disciplines may be useful and well qualified for the counseling of substance abusers. Certainly a psychiatrist would be well qualified by virtue of training for such a function. However, not every practicing physician would necessarily be so qualified by virtue of the physician's limited training in substance abuse patterns and treatments and lack of experience in dealing with such problems. Evaluations of treatment methodologies do not indicate that any of the alternate approaches is necessarily superior to other approaches, and it may be argued that the same principle likely applies to the evaluation, counseling, and treatment referral functions of EAP counselors. See, e.g., *The Effectiveness and Costs of Alcoholism Treatment*, Health Technology Case Study 22 at 4, 23-32, 43-53 (Office of Technology Assessment 1983).

FRA disagrees with the contention of the railroads that the railroad should be free to designate a non-qualified person to make return-to-service decisions. Permitting a non-qualified person to make the decision simply to uphold the institutional prerogatives of a particular railroad officer would merely invite that officer to act on the basis of factors not related to the employee's prognosis for continued sobriety. If it is intended that that officer act solely on the basis of advice from qualified persons, then the officer is performing a redundant function.

5. Pre-employment Drug Screens

a. Summary of Proposed Rule (sec. 218.107)

The proposed rule mandated that each applicant for a position in covered service be tested for the presence of alcohol or drugs. It was intended that samples be collected in connection with routine pre-employment physical examinations.

The rule would have required that applicants be advised at least 7 days prior to the examination that the urine sample would be tested for alcohol and drugs. If an applicant declined the test, the railroad would keep no record of the declination.

The proposed rule specified certain substances for which drug screening should be done, required confirmation of positive samples, and provided that applicants should be notified of the results and be afforded to provide an explanation for the finding before any action was taken on the application for employment.

The rule further provided that test records should be kept for two years and that annual reports should be submitted to FRA concerning the findings and handling of employees who tested positive. Railroads employing 15 or fewer employees in covered service would be excepted from the proposal.

b. Public Comments

Mandatory pre-employment drug screens drew support from five individuals or organizations, eight railroads, and two labor representatives. The UTU, RLEA and ATDA indicated they had no objection. One local labor representative and the ACLU opposed the provision. Two railroads thought the concept of pre-employment drug screens could best be implemented by individual railroads without the strictures of Federal regulations. One of these railroads was the pioneer in use of the technique in the industry and the other indicated it intended to implement a pre-

employment testing program whether or not regulations were issued.

Growth of pre-employment screening. At the time the NPRM was prepared FRA had identified only one railroad that was actively utilizing urine drug screens. Comments received in response to the NPRM indicate that four additional railroads have instituted pre-employment programs. Further, two major freight railroads (including the railroad mentioned above) said they were about to begin their own programs. Other railroads appeared to be waiting for a resolution of this rulemaking before determining what their policy would be.

Effectiveness. A consultant with expertise in drug abuse said that pre-employment screening could effectively reduce the proportion of active drug users if there is good follow-through. There was no direct challenge to FRA's expressed rationale for the screens. However, one local labor commenter said that the 60-day probationary period for new employees, evidently in use by his employer, provides adequate opportunity to screen out those with serious drug abuse problems.

Events covered. Amtrak advocated expansion of the mandate to include periodic examinations of employees already on board. A commuter railroad wanted to have the prerogative to test at the time of periodic physicals (but not the obligation). The AAR and several railroads wanted a mandatory screen for any employee transferring into covered service from other railroad work. Three freight railroads recommended mandatory screens on return from furlough and on transfer, as well as pre-employment. A major freight railroad, taking the same position expressed by Amtrak, wanted the mandate to reach periodic physical examinations; but neither appeared willing to accept FRA prescription of the intervals between examinations.

In general, the railroads did not offer clear reasons why FRA should require them to undertake drug screens for current employees, although one major freight railroad did say it currently does not have the right to require exams of employees returning from short furloughs. (See further discussion under "Medical Disqualification" below.)

Alcohol. AAR and a major freight railroad advocated elimination of alcohol from pre-employment screens. This is apparently an objection based on the cost of the additional procedure and the assumption that the assay would pick up trace (immaterial) levels. The railroad said that the screens should concentrate on detecting those who use illicit drugs. On the other hand, a

consultant who had performed a study for NIDA on drugs not detected at the time of hospital admissions urged that alcohol be included, since it may indicate a polyabuse pattern and provide more complete data for the examining physician.

7-day notification. The requirement of seven-day notice for pre-employment drug screens met with almost universal disapproval, with only ACLU contending for its retention. The railroads and others argued that prior warning would permit many drug users to temporarily discontinue their habit or pattern of use and reduce the effectiveness of the screens. Some railroads said that they sometimes would not have sufficient time to afford the required notice. None of the railroads expressed objection to a system under which notification would be provided on the day of the examination but before the sample is collected.

Analysis and confirmation. The AAR and two railroads suggested that the duty to screen should end when the first drug abuse is detected. Several commenters misinterpreted the disjunctive requirement to confirm positives "by another laboratory, or by another method . . ." They evidently believed that two laboratories would have to be involved and objected to this requirement as unnecessary.

Six railroads advocated that the requirement that positives be confirmed (by a second test on the same sample) should be removed or made permissive. Two railroads would not confirm except on request of the applicant. The AAR and at least two railroads would conduct confirmatory testing only at the applicant's expense. One railroad suggested that the sample might be insufficient for a second test.

Medical disqualification. AAR urged adoption of a specific declaration that a positive test result or refusal to submit to a test "shall be sufficient cause for refusal to employ an applicant or transfer an employee to covered service." That is, the railroad could elect to refuse employment, but would not technically be compelled to do so. The AAR comment was supported by several railroads, but two railroads wanted the rule to mandate disqualification of applicants testing positive.

One railroad tempered its comments by agreeing that a single positive should not disable a person from being hired at a later date (after "rehabilitation"), and another said that the disqualification for present employees should last only until

the employee ceases use of the drug as demonstrated by clean urine specimens.

A major freight railroad suggested that AAR develop uniform testing methods and identify the drugs for which tests will be conducted. In the commenters' view, uniformity of industry practice would avoid any later charge of discrimination by one or more rejected applicants.

BLE questioned the value of a pre-employment screen in the absence of clear standards upon which hiring determinations would be made. BLE feared that information concerning drug use would be used to "blackmail" employees after they are hired.

A major freight railroad said FRA should forbid the return to service or continuation in service of an employee in whose urine proscribed substances are detected until the employee is able to provide a urine sample that is negative for those substances.

Notification of results; opportunity to explain results. One railroad thought notifying applicants of positive results was unnecessary ("an idle exercise"), while another demurred to notification for negative results. AAR and several railroads objected to providing an applicant with an opportunity to explain the presence of a detected drug. They noted that physical examination forms routinely ask whether the applicant has recently taken any drugs and that honesty in such responses is an important means of evaluating the applicant. One railroad would permit the applicant a maximum of 7 days within which to respond.

Applicants rejected on other grounds. One railroad pointed out that the drug screen should not be required of an applicant who is rejected on other grounds. The railroad believed the proposed rule should be clarified to excuse a drug screen in such a case.

Records and reporting. BLE wanted drug screen results to be treated confidentially, comparing them to medical and personnel records. Other labor commenters worried that detection of therapeutic drugs might reflect adversely on applicants' reputations. A major railroad objected to keeping records on applicants not hired, saying that they are not required for safety.

Amtrak wished to maintain records of positive tests on persons not hired because of the widely separated locations at which they hire.

AAR and several railroads opposed the annual report requirement as unnecessary and burdensome. The railroads appeared willing to retain information for FRA review, but did not wish to tabulate and report the

information solely for the purpose of generating national statistics.

c. Final Rule Provision (Subpart F)

The final rule retains the pre-employment drug screen requirement in order to ensure that all subject railroads will utilize this technique. Given present knowledge and assays, urine is the sample of choice. The purpose of the screen (by which is meant a reasonably comprehensive series of tests) is to determine whether the applicant is using drugs of abuse or abusing therapeutic drugs. Armed with this information and other results of the pre-employment examination, the railroad can then make an enlightened hiring decision.

It is neither necessary nor practicable to specify employment outcomes in the wide range of situations that will arise after positive tests. Depending on the drug, degree of abuse or dependence, and the honesty of the applicant in reporting drug use habits, the railroad might elect to reject an application outright, reject with an invitation to resubmit at a later date, or keep the application pending until the applicant can show that use has been discontinued.

Section 219.501 requires that the railroads institute pre-employment drug screens within 120 days of the effective date of the rule. Only final applicants need be screened. Whenever feasible, the sample is to be obtained in connection with a pre-employment physical examination. The applicant must be advised that a drug screen will be performed prior to the collection of the urine sample. If the applicant decides not to cooperate, the applicant may withdraw the application for employment and the railroad is barred from retaining any record of the declination.

FRA has not included the proposed requirement for a 7-day pre-notification of the drug urine screen. FRA agrees that such a requirement would tend to reduce the usefulness of the screens and is not necessary to protect the privacy of the applicant. Notification prior to collection of the sample provides adequate protection for any privacy interest.

Samples are to be tested for opiates (narcotics), cocaine, barbiturates, amphetamines, cannabis (marijuana), phencyclidine (PCP), and other drugs identified by the railroad. The railroad may elect to test for alcohol, but is not required to do so. If the first test of a sample is positive, the sample is to be tested a second time by another method specific for the substance detected.

Section 219.503 requires the railroad to notify the applicant of the results of

any test that is positive (on confirmation) for any drug. FRA sees no purpose in requiring separate notification for the majority of tests that will be negative. The applicant must be permitted to explain the finding, unless the railroad has previously provided the opportunity to report any recent drug use. (Most railroad forms routinely provide for questions going to drug use.)

The railroad must keep records of tests conducted under this section for at least 2 years and make them available to FRA for review. The rule provides that the test records need not reflect the identity of applicants who were not hired.

Section 219.505 states the obvious proposition that an applicant who has refused a drug urine screen cannot be hired for a position that involves covered service based upon the then-pending application. This rule does not prevent the person from submitting a subsequent application to the same railroad or a different railroad and being hired after providing the urine sample for analysis.

Reporting. At the request of several commenters, the requirement for annual reports on the results of pre-employment drug screens is not included in the final rule. FRA agrees that such data would be of limited usefulness, given the growing awareness within the railroad industry of the drug abuse problem.

6. Improved Accident Reporting

a. Proposed Rule (§ 225.17(d))

The NPRM proposed to amend FRA's regulations for accident/incident reporting to require that the railroads make specific inquiry into alcohol or drug use or impairment in the circumstances of train accidents (§ 225.17). The railroad would be required to report any information developed in the course of the investigation, whether or not the railroad deems it relevant to cause. Where alcohol or drug use was alleged or confirmed but the railroad did not report such involvement as related to cause, the railroad would be required to provide a short explanation for its determination.

b. Public Comment

The commenters generally supported the proposal for improved reporting. One railroad suggested that a separate code be made available where alcohol or drugs are not implicated in the cause of the accident.

c. Final Rule (§ 225.17(d))

The final rule substantially follows the language of the proposed rule, but

also includes a cross-reference to the requirement of § 219.209 (§ 218.103(f) of the proposed rule). The amendment will improve the existing accident/incident reporting system by emphasizing the importance of inquiring into fitness considerations after train accidents. FRA is modifying the Guide for Reporting Accident/Incident Reports to provide multiple codes from which the railroads may select to report with greater specificity the role of alcohol and drugs in train accidents. FRA is also modifying portions of the Guide relating to injuries in order to gather information concerning alcohol and drug involvement in personal injuries in train and non-train incidents. These measures, together with post-accident toxicological testing and authority for testing on reasonable cause, should provide an adequate basis for quantifying and measuring trends in the control of alcohol and drug use.

In making these changes, FRA emphasizes to the railroads their obligation to file late reports providing corrected or updated information on events previously reported (49 CFR 225.13). Analysis of toxicology reports and the conduct of railroad disciplinary investigations will often develop information that establishes, or excludes, the involvement of alcohol or drugs. These issues may not be fully resolved during the period prior to submission of the monthly report. Railroads should take care to supplement or correct incomplete or erroneous reports. FRA will undertake enforcement action where this obligation is not fulfilled.

Administrative Provisions (Miscellaneous Amendments)

The final rule makes miscellaneous amendments that are necessary because of the decision to create a new subpart and for various other reasons.

State participation. FRA's regulations for the State Safety Participation Program (49 CFR Part 212) are amended to provide appropriate references to the new Part 219 and thereby facilitate State participation in enforcement of the new rules. (See NPRM at 193; 49 FR 24298.) FRA will provide training for both FRA and State inspectors charged with this responsibility.

Operational tests. FRA's regulations for filing of Railroad Operating Rules and reports of efficiency tests and inspections (49 CFR Part 217) are amended by adding a new paragraph (d) to § 217.13. Under the proposed rule, inclusion of alcohol and drug rules in Part 218 would have automatically required inclusion of the results of related observations, tests and

inspections in the Part 217 reports (§ 218.11). Indeed, Rule G observations and inspections are already within the purview of Part 217.

However, during development of this final rule FRA has noted that railroad compliance with the reporting requirements of Part 217 has been notably uneven and imprecise with respect to Rule G activities. Further, FRA has identified the need to determine the number of breath and urine tests, and optional blood tests, administered by the railroads, and the results of those efforts. This information collection objective is particularly important in view of the deletion of the 3-test limitation and the need to monitor railroad activities to ensure that use of this authority is both measured and effective.

Accordingly, the final rule makes more explicit the specific data elements that FRA will expect to see in section 217.13 annual reports.

Part 218 is renamed "Railroad Operating Practices" to avoid confusion with Part 217.

Legal Issues

Comments raising jurisdictional or constitutional objections to provisions contained in the NPRM were rather limited in number. One employee representative believed that the post-accident testing would violate an employee's privilege against self-incrimination. It will not. *Schmerber v. California*, 384 U.S. 757 (1966) (hereinafter cited as *Schmerber*). A second employee representative argued any testing without "probable cause" was an unreasonable search under the Fourth Amendment, an issue discussed below. The Washington Legal Foundation reviewed the proposed rules and found them consistent with the Federal Constitution and laws.

The most pointed legal challenge to the rules was mounted by the American Civil Liberties Union (ACLU), which both appeared before FRA in a public hearing and submitted a filing for the docket. FRA is indebted to the ACLU and other commenters for joining the legal issues during the rulemaking process. The protections of the Constitution are vital to every citizen and are the most fundamental limitation on executive action, including the rulemaking function. The comments made by the ACLU, in particular, have contributed to FRA's analysis of final rule decisions and to the process of regulatory refinement that has produced the final rule. Nevertheless, FRA's own judgment concerning the constitutional issues, particularly the application of the Fourth Amendment, is considerably at

variance from the position articulated by the ACLU.

Post-Accident Testing. The ACLU objects to post-accident testing as violative of the Fourth Amendment because searches could be conducted with less than individualized probable cause. At some points in its submission ACLU uses the term "individualized suspicion of impairment" interchangeably with "probable cause." Reasonable suspicion (we assume an unreasonable suspicion is not intended) is a test clearly short of traditional criminal probable cause. The ACLU submission appears not to recognize the distinction until page 10, at which ACLU says "probable cause rather than reasonable suspicion is the required standard." FRA assumes ACLU intends to refer to traditional criminal probable cause, which in the case of alcohol impairment probably requires more than a mere suspicion (however reasonable) to warrant arrest (though not detention).

FRA recognizes that searches authorized under the post-accident testing provisions must conform to the requirements of the Fourth Amendment, since the provision is mandatory on railroads and employees alike and since blood tests are searches within the ambit of the Fourth Amendment. See *Schmerber*, 384 U.S. at 767.

Generally, the Fourth Amendment requires that a search be conducted only pursuant to a warrant. However, the ACLU concedes post-accident testing is a clear exception to the warrant requirement. Courts have sanctioned warrantless searches where the delay inherent in seeking a warrant might lead to the destruction of the evidence. See, e.g., *Schmerber* (upheld a compelled, warrantless blood test, reasoning that the rapid dissipation of alcohol in the blood after drinking was tantamount to a threatened destruction of evidence). The warrant exception also exists where the search is pursuant to a regulatory scheme or is a search of a closely regulated business. See *Donovan v. Dewey*, 452 U.S. 594, 600 (1981). Railroad is such a business.

Ordinarily, a search must be based upon probable cause to believe a violation of law has occurred. *Katz v. United States*, 389 U.S. 347, 357 (1967). However, probable cause is not an absolute requirement for a valid search. The fundamental command of the Fourth Amendment is that searches be "reasonable". To determine the standard of reasonableness governing any specific class of searches requires a court to balance the intrusiveness of the search against its promotion of legitimate government interests. See

Hudson v. Palmer, 104 S.Ct. 3194 (1984) (determining whether an expectation of privacy is "legitimate" or "reasonable" necessarily entails a balancing of interests); *New Jersey v. T.L.O.*, 105 S.Ct. 733, 743 (1984) ("Where a careful balancing of governmental and private interests suggests that the public interest is best served by a Fourth Amendment standard of reasonableness that stops short of probable cause, we have not hesitated to adopt such a standard.")

The Supreme Court has in several contexts recognized the legality of searches based on suspicions which, although "reasonable", do not rise to the level of probable cause. Customs officers may stop and subject persons to a "border search" on the basis of mere suspicion alone, restricted only by the requirement that the search be reasonable. *United States v. Martinez-Fuerte*, 428 U.S. 543, 562 (1976), (upholding warrantless, routine border patrol stops of vehicles at fixed checkpoints). Airport pre-boarding security procedures, including searches, may be conducted on mere or unsupported suspicion. *United States v. Skipwith*, 482 F.2d 1272, 1276 (5th Cir. 1973) (standards for initiating search of person at boarding gate should be no more stringent than those applied in border crossing situations). See also *Sec. & Law Enforcement Emp., Dist. C. 82 v. Carey*, 737 F.2d 187, 204-05 (2d Cir. 1984) (reasonable suspicion standard governs warrantless strip searches of correction officers); *Hunter v. Auger*, 672 F.2d 668, 674 (8th Cir. 1982) (reasonable suspicion standard governs the strip searches of visitors to penal institutions).

In administrative search situations, a lesser showing of suspected reason to search is used, often referred to as administrative probable cause. Administrative probable cause requires that a search satisfy specific neutral criteria embodied in a reasonable administrative plan. *Donovan*, supra, 452 U.S. at 601; *Camara v. Municipal Court*, 387 U.S. 523, 538 (1967).

Another exception to the probable cause requirement is the search based upon consent. See *United States v. Mendenhall*, 446 U.S. 544 (1980); *Schnecko v. Bustamonte*, 412 U.S. 218 (1973). See also *United States v. Sihler*, 562 F.2d 349, 351 (5th Cir. 1977) (where defendant prison guard knew that all persons entering the prison were subject to search, search of defendant made after he entered prison for work was made with his consent).

These currents of Fourth Amendment law converge in the present matter. Any "search" will clearly be administrative and not in aid of a criminal

investigation. The rule provides clear guidelines as to when post-accident testing is required; and the system of inspection is carefully regulated as to time and manner of testing. The public interest is compelling, and the degree of intrusion is limited. Employees can reasonably be required to consent to testing on the basis of notice provided in this final rule. It is not surprising, therefore, that the only Federal appeals court that has ruled on a similar program has found it without constitutional defect. *Div. 241 Amalgamated Transit U. v. Suscy*, 538 F.2d 1264 (7th Cir. 1976), cert. denied, 429 U.S. 1029 (1976).

Suscy involved a rule instituted by a public employer requiring bus drivers and train operators to submit to blood and urine tests. In *Suscy* the court found that the state's paramount interest in protecting the public by ensuring that bus and train operators are fit to perform their jobs outweighed any individual interest in refusing to disclose physical evidence of intoxication or drug use. 538 F.2d at 1267.

The ACLU considered this case, but misconstrued it. The ACLU argued that *Suscy* requires a finding of individualized probable cause, since the regulation required the concurrence of two supervisory employees that an employee gave grounds for suspicion of impairment before post-accident testing could be ordered. In fact, the Chicago Transit Authority policy considered in that case required either a particularized suspicion or the occurrence of an accident in order to operate. 538 F.2d at 1266. It is true that the concurrence of two supervisory employees was necessary to order the tests in either of those two situations (a condition presumably intended to check individual discretion under a program that was permissive as to management action, rather than mandatory), but it does not appear from the Seventh Circuit or district court opinion that specific suspicion of alcohol or drug use was necessary following an accident. Consequently, the court never held individualized probable cause was required. To the contrary, the court cited *Camara v. Municipal Court*, 387 U.S. 523, 539 (1967), for the existence of "probable cause." *Camara* is, of course, a case articulating the administrative probable cause test. The court also specifically noted that because of the substantial public safety interest, bus and train drivers could have no reasonable expectation of privacy with regard to submitting to blood and urine tests. 538 F.2d at 1267.

The final rule differs somewhat from the proposed rule in a respect material

to the ACLU line of argument. The ACLU contended that the proposed criteria for post-accident testing "bears not even a rational relationship to the drug or alcohol caused impairment of a railroad employee, and thus adds nothing to any showing of probable cause." For reasons related to program effectiveness, FRA has substantially reformulated the criteria for testing, focusing more heavily on those events that are likely to involve human failure (as well as retaining events that involve substantial public interest). Further refinement of the system is not possible, consistent with the objective of documenting the kind of alcohol and drug impairments that are escaping documentation at the present time.

FRA also disagrees with the ACLU contention that use of damage thresholds adds a large element of discretion to the testing program. Although a railroad will have the practical ability to exercise limited judgment at the margin, FRA has focused on railroad damage costs, which is a reasonably objective and determinable criterion, and the best available for the purpose. If the dollar limitations of the rule were deleted, hundreds of additional accidents would be required to be included, a result presumably not consistent with the common aim of FRA and the commenter to limit intrusions to the minimum necessary. Indeed, the categorical approach of the rule avoids the kind of discretionary action that may run afoul of constitutional protections. *Delaware v. Prouse*, 440 U.S. 648, 654-55 (1979) (police stop for license check violates the Fourth Amendment when police may exercise 'unbridled discretion'; but road block-type stop might be permissible).

FRA has previously addressed the quality of the hearing required after an employee's wrongful refusal to be tested and acknowledges the ACLU's contribution to its final formulation.

Authority for breath and urine testing on reasonable cause. ACLU likewise found fault with the proposal for testing on "just cause," the antecedent of Subpart D of the final rule, asserting that such testing would be warranted only in the case of probable cause.

The threshold issue with respect to application of the Fourth Amendment to Subpart D is whether the actions of the railroad supervisor in requiring the employee to submit to testing at a particular time and place constitute Federal action. The rule merely authorizes testing in a limited subset of situations where railroads would test, were they not constrained by union agreements (and perhaps one State

statute). From the inception of the railroad industry, the individual railroads have exercised control over alcohol and drug use by employees. Until this final rule, by contrast, the Federal Government has never exercised jurisdiction over railroad employees' use of drugs or alcohol; and this rule does not Federalize railroad disciplinary actions that may follow from the test procedures in question. Action of a private party does not constitute state (or Federal) action unless there exists a close nexus between the state and the action in question. *Jackson v. Metropolitan Edison*, 419 U.S. 345 (1974); *Moose Lodge No. 107 v. Irvis*, 407 U.S. 163 (1972). Neither pervasive government regulation, nor the fact that the action was taken pursuant to state authority, are by themselves sufficient to create the necessary nexus. *Jackson*, 419 U.S. at 358. Indeed, the fact that a function is mandated by Federal regulation may not be sufficient to create Federal action if administration is wholly private. *Blum v. Yaretsky*, 457 U.S. 991, 1008-1010 (1982) (no state action though Federal regulations required reviews in question). The government's mere encouragement of private conduct has been consistently held not to convert private action into state action. See *Flagg Bros., Inc. v. Brooks*, 436 U.S. 149, 164 (1978).

Accordingly, FRA is persuaded that railroad actions to require breath or urine tests under authority of Subpart D would not constitute Federal action.

Assuming, *arguendo*, that Fourth Amendment protections apply, the post-accident analysis above, which demonstrates that no warrant or (traditional criminal) probable cause is required, applies to the reasonable cause testing situations. Indeed, provisions of the rule that authorize testing on "reasonable suspicion" directly respond to the ACLU concern that suspicion be particularized. In the final rule, FRA requires training of supervisors to ensure the reasonableness of suspicion with respect to drug use.

The categorical portions of the rule are specifically designed to limit discretion in the field. Again, the nature and scope of the search is strictly limited to serve the legitimate governmental interest for the search. Only breath and urine samples may be required, and the more invasive blood testing procedure is optional with the employee.

Like post-accident testing, the context is civil, and the search, if any, is best described as administrative. The provisions of the rule are analogous to

search authority contained in regulations upheld by the Supreme Court and meet the requirements for search authority outlined in those cases. See *Donovan v. Dewey*, 452 U.S. 594 (1981) (upheld statutory provisions allowing routine inspections of mines because the statute provided (1) statutory criteria for the search and (2) tailored the scope of the inspections to the particular safety concerns of the regulated business); *Colonnade Catering Corp. v. United States*, 397 U.S. 72 (1970) (upheld search based on suspicion of violation of federal liquor laws where search of regulated industry limited in time, place and scope.); *United States v. Biswell*, 406 U.S. 311 (1972) (upheld statute authorizing officials to enter at their discretion the premises of licensed gun dealers during business hours to inspect records, firearms and ammunition). Compare *Marshall v. Barlow's, Inc.*, 436 U.S. 307 (1978) (warrant required for searches under a statutory scheme that (1) failed to tailor the scope and frequency of inspections to the particular health and safety concerns where search authorized any place where work is performed by an employee, and (2) failed to provide any standards to guide inspectors in the exercise of their authority to search where only limitation was that searches be reasonable).

Under the rule the decision to test is made in response to either a reportable accident or injury or one of several enumerated rule violations that are indicative of a serious performance failure. The rule specifically outlines the criteria which invoke testing and the procedures to be used. The presence of some degree of discretion on the part of decision makers is inevitable. The mere presence of such discretion does not subject the testing authority to question. See *United States v. Skipwith*, *supra*, 482 F.2d at 1276 (discretion involved in applying anti-hijacking profile, but criteria for search upheld).

Finally, it should be noted that FRA does not authorize, and could not legitimately be implicated in, any wrongful requirement for testing under color of the regulation. Indeed, the railroad would be subject to penalty for any such excess. The rule itself defines the parameters within which it may be used.

In crafting the final rule, FRA has further limited the ability of railroads to require tests after accident/incidents and rule violations, ensuring that the action taken by the railroad is rationally related to the development of fitness information in cases where the fitness of the particular employee is in doubt. This approach limits the discretion of the

railroad supervisor to the extent practicable consistent with the effectiveness of the tool conferred. Were FRA to require a specific individualized suspicion of alcohol or drug impairment with respect to each employee involved in the denominated accidents/incidents and rule violations, the utility of the rule as a tool of detection and deterrence would be substantially diminished.

Beyond these limitations FRA cannot go, consistent with the need to promote public safety. FRA does not believe that the reasonableness test of Fourth Amendment need be read to put the public at risk.

Pre-employment drug screens. The ACLU's treatment of the pre-employment drug screen proposal is summary in nature. FRA simply disagrees that the relationship between use of drugs of abuse and future impairment is attenuated. The issue of drug abuse goes directly to fitness, and applicants for employment may reasonably be required to have their fitness evaluated. There is no physical intrusion required beyond existing urine collection procedures normally employed for other purposes. FRA retains the requirement that the applicant provide a valid and knowing consent to the test.

Alternative methods. In its comments and filing made at the end of the second public comment cycle in this rulemaking, ACLU suggested that alternate means could be developed for determining employee fitness that would presumably not require any "search" within the meaning of the Fourth Amendment. FRA wishes it were that simple. The human organism is the most complex known creation in the universe. Creating an adequate battery of tests that could measure present fitness and predict future fitness (as alcohol or drug levels might rise or fall) with benchmarks that would be generally recognized as fair and appropriate is a task that could be accomplished only over the very long term. Indeed, various methodologies and devices have been tried in the highway mode, but have thus far failed of general acceptance.

Techniques have been developed, or are under development, that can serve as a predicate for a breath or body fluid test, but they generally require a significant amount of training and practice. It is not realistic to suppose that railroad supervisors, who are already required to know massive amounts of information in order to discharge their responsibilities properly, can be turned into expert evaluators of alcohol and drug impairment.

Today we do have simple, painless and reliable means of detecting and confirming alcohol and drug use (and impairments) that do not offend the dignity of the individual and do not require significant cost or inconvenience. Lives and limbs are being lost in the short term and will be lost in the mid-term unless we use the tools available to use now. FRA began this rulemaking process with an ANPRM that invited all interested parties to identify options for regulatory action and has pursued the most reasonable and effective means identified through that process. To be diverted now by unspecified techniques that have not yet been developed would be both tragic and senseless.

Implementation of the Rule

Petitions for Reconsideration

Petitions for reconsideration of the action announced in this final rule may be filed under the FRA Rules of Practice (49 CFR Part 211), not later than October 1, 1985. FRA will endeavor to act on any such petition prior to the effective date of the rule.

Phased Implementation

The new Part 219 will be implemented in phases beginning with the effective date, which is November 1, 1985. Compliance with Subpart C (post-accident toxicological testing) is required beginning December 1, 1985, but a railroad is authorized to commence testing in compliance with the regulation on the effective date of the part. Compliance with Subpart F (pre-employment drug screens) is required beginning on March 1, 1986, but compliance is authorized on and after the effective date. Additional time is provided to commence testing under Subparts C and F because those provisions are mandatory and will require some logistical preparation. Amendments to existing rules are effective on November 1, 1985, except the amendment to Part 225 (Accident/Incident Reporting), which is effective January 1, 1986.

Implementation Conferences

During the interval between publication of this final rule and the effective date, FRA will hold a series of regional implementation conferences for the purpose of explaining the final rule to employee representatives, railroad managers and supervisors, and other interested persons. At those conferences FRA will introduce the Field Manual and provide suggestions for addressing the practical problems that will be occasioned by initial implementation.

The dates and times of those conferences will be announced shortly. Those wishing to attend the conferences are requested to contact Mr. Walter Rockey at the Office of Safety, FRA (address and telephone shown above under "FOR FURTHER INFORMATION CONTACT") indicating the location chosen, number of persons attending, and the address and telephone number at which a representative of the person or group can be reached.

Further Rulemaking

FRA will monitor the experience of the railroads under these rules and private sector actions taken to address the problem of alcohol and drug use in railroad operations. In particular, FRA will carefully review the results of the post-accident testing program, data from the improved system of accident/incident reporting, reports filed under Part 217, and field investigations under this final rule to determine whether modification of these requirements, or additional regulatory initiatives, may be indicated. FRA will take particularly careful notice of the efforts of the railroads and employee organizations to address the safety dimensions of alcohol and drug use among employees not subject to the coverage of the Hours of Service Act whose functions may, nevertheless, impact on safety. Such employees may include persons in supervisory ranks, maintenance-of-way employees, car and locomotive department personnel, on-board passenger service personnel, and non-covered yardmasters. FRA believes that the models provided by this rule could help form the basis for private sector actions that would obviate the need for more extensive regulation.

Although FRA is not presently announcing further rulemaking, FRA nevertheless welcomes communications relevant to the implementation of the final rule, in particular, and the control of alcohol and drug use on the railroads, in general. When sufficient experience has been gained under the final rule, FRA will set this matter for hearing with a view to appropriate further action.

Regulatory Impact

E.O. 12291 and DOT Regulatory Policies and Procedures

These final regulations have been evaluated in accordance with existing regulatory policies and are considered to be non-major under Executive Order 12291. However, they are considered to be significant under the DOT policies and procedures (44 FR 11034; February 26, 1979) because they initiate a substantial regulatory program.

Consequently, FRA has prepared and placed in the rulemaking docket a regulatory evaluation addressing the economic impact of these rules. It may be inspected and copied at Room 8201, 400 Seventh Street, S.W., Washington, D.C., 20590. Copies may also be obtained by submitting a written request to the FRA Docket Clerk at the same address.

The economic evaluation identifies total estimated annual benefits from avoidance of accidents and incidents of \$18,127,587 and estimated costs of \$12,665,573. Both benefits and costs are stated at discounted present value (10% discount factor) for a program life of 20 years, using constant 1984 dollars. The 20-year estimated program life is the term used in the analysis accompanying the NPRM, and FRA believes that it is reasonable given the relatively long tenure of supervisors in the industry (who will require training at start-up), the useful life of apparatus to be purchased in the first year, and the replacement and recurring costs assumed over the program life. On an annual basis, the discounted present value of benefits averages \$906,380 and the discounted present value of costs averages \$633,279. The benefit to cost ratio is 1.43 to 1.

This ratio is conservative. The estimated benefits rely upon the documented data base, which is undoubtedly incomplete, and do not include estimates of undocumented safety consequences. Nor do the estimated benefits include projections for avoidance of the following consequences of alcohol and drug-related accidents: costs of personal injuries in train accidents and incidents (and non-train incidents involving covered employees); non-railroad property damage in train accidents, including lading and improvements to adjacent property; emergency response costs; environmental clean-up costs; and incidental railroad costs such as wreck clearance, train delays, and higher crew costs.

The final economic evaluation, like the evaluation prepared for the proposed rule, does not separately quantify the benefits and costs associated with the provisions on identification of troubled employees (Subpart E). FRA pointed out in the initial evaluation that railroads and other employers that have experience with employee assistance programs find them to be highly cost-beneficial in their own right. Further, many of the benefits that flow from these programs, such as improved productivity, reduced health care costs, reduced absenteeism, and

the like, are not directly relevant to the specific objectives of these rules. FRA believes that the voluntary referral and co-worker report policies will encourage the establishment of employee assistance programs and help to strengthen the programs already in place. FRA has deliberately avoided the kind of detailed procedures and standards that could inhibit the development of these programs or reduce their efficiency.

FRA has refined the economic evaluation employed in connection with the proposed rules to reflect changes incorporated in the final rules and the updated accident data discussed earlier. In making these refinements FRA is relying exclusively on its own research, since the commenters neither challenged nor substantively commented on FRA's initial economic evaluation.

Regulatory Flexibility Act

FRA certifies that these final rules will not have a significant economic impact on a substantial number of small entities. The rules apply only to railroads and, accordingly, will have no direct impact on small units of government, businesses and other organizations. As noted earlier, State rail agencies will be free to participate in the administration of these rules but are not required to do so.

Although a substantial number of small railroads are subject to these regulations the economic impact of the rules will not be significant for several reasons. Only a very few accidents occur each year on these small railroads that will require compliance with post-accident testing provisions of the rule. FRA has excluded very small railroads from the requirements of Subpart C (Authorization to Test for Cause), Subpart E (Identification of Troubled Employees), and Subpart F (Pre-Employment Drug Screens). The remaining small railroads will experience very little impact from the pre-employment drug screen provisions because of the small number of new hires and the low per-unit cost of testing. The authorization to test for cause is, of course, permissive. Satisfaction of the provisions on identification of troubled employees should not present significant problems, since resources for evaluation and counseling of employees are widely available on a fee-for-service or contract basis in the private market; and the American Short Line Railroad Association reports that most small railroads view their substance abuse problems as minimal or nonexistent. In general, small railroads are well situated to satisfy the requirements of

these rules because of their limited employee populations, geographically more compact operations and greater capacity to provide close supervision.

Although FRA specifically requested comment on the impact of these rules on small entities, FRA did not receive any comments that directly addressed this issue. The comments that focused on the appropriateness of making certain aspects of the proposed rules applicable to small railroads are discussed above in the context of incorporating further exclusionary provisions in the rule itself.

Paperwork Reduction Act

The rules being adopted in this proceeding contain revised information collection requirements in the following sections: 219.203, 219.205, 219.207, 219.209, 219.211, 219.213, 219.301, 219.303, 219.305, 219.307, 219.309, 219.401, 219.405, 219.407, 219.501, 219.503. Revised information collection requirements are also contained in the amendments to § 217.13 and § 225.17. The Office of Management and Budget (OMB) has approved the information collection requirements in the proposed rule, but has not yet approved the revised information collection requirements of this final rule. FRA is submitting these revised information collection requirements to OMB for approval under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). FRA anticipates that OMB will undertake prompt action on these requests for approval. When OMB has approved these revised requirements, FRA will publish a notice in the *Federal Register* announcing that action. Section 219.21 of the new Part 219 has been reserved to list the information collection sections and the control number assigned by OMB. Compliance with the revised information collection requirements is not required until the approvals have been provided and the control number has been assigned. Any comments on the revised information collection requirements should be provided to Mr. Gary Waxman, Regulatory Policy Branch, Office of Management and Budget, New Executive Office Building, 726 Jackson Place, N.W., Washington, D.C. 20503.

Environmental Impact

FRA has evaluated these regulations in accordance with its procedures for ensuring full consideration of the environmental impact of FRA actions as required by the National Environmental Policy Act (42 U.S.C. 4321 et seq.), other environmental statutes, Executive Orders, and DOT Order 5610.1c. These regulations meet the criteria that

establish this as a non-major action for environmental purposes.

List of Subjects

49 CFR Part 212

Railroad safety, State Safety Participation Program.

49 CFR Part 217

Railroad safety, Railroad operating rules, Reporting and recordkeeping requirements.

49 CFR Part 218

Railroad safety, Railroad operating practices.

49 CFR Part 219

Railroad safety, Control of alcohol and drug use, Reporting and recordkeeping requirements.

49 CFR Part 225

Railroad safety, Accident/incident reporting, Reporting and record keeping requirements.

In consideration of the foregoing, Chapter II, Subtitle B, of Title 49, Code of Federal Regulations is amended as follows:

1. A new Part 219 is added to read as follows:

PART 219—CONTROL OF ALCOHOL AND DRUG USE

Subpart A—General

- Sec.
- 219.1 Purpose and scope.
- 219.3 Applications.
- 219.5 Definitions.
- 219.7 Waivers.
- 219.9 Responsibility for compliance.
- 219.11 Consent required; implied.
- 219.13 Preemptive effect.
- 219.15 Alcohol concentrations in blood and breath.
- 219.17 Construction.
- 219.19 Field Manual.
- 219.21 [Reserved]

Subpart B—Prohibition

- 219.101 Alcohol and drug use prohibited.
- 219.103 Prescribed and over-the-counter drugs.

Subpart C—Post-Accident Toxicological Testing

- 219.201 Events for which testing is required.
- 219.203 Responsibilities of railroads and employees.
- 219.205 Sample collection and handling.
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Subpart E—Identification of Troubled Employees

- 219.401 Requirement for policies.
- 219.403 Voluntary referral policy.
- 219.405 Co-worker report policy.
- 219.407 Alternate policies.

Subpart F—Pre-Employment Drug Screens

- 219.501 Pre-employment drug screens.
- 219.503 Notification; records.
- 219.505 Refusals.

Appendix A—Schedule of Civil Penalties

Authority: Sec. 202 and 209, Pub. L. 91-458, 84 Stat. 971 and 975, as amended (45 U.S.C. 431, 438) and 49 CFR 1.49. Subpart C also issued under sec. 208, Pub. L. 91-458, 84 Stat. 974, as amended (45 U.S.C. 437).

Subpart A—General

§ 219.1 Purpose and scope.

(a) The purpose of this part is to prevent accidents and casualties in railroad operations that result from impairment of employees by alcohol or drugs.

(b) This part prescribes minimum Federal safety standards for control of alcohol and drug use. This part does not restrict a railroad from adopting and enforcing additional or more stringent requirements not inconsistent with this part.

§ 219.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to—

(1) Railroads that operate rolling equipment on standard gage track which is part of the general railroad system of transportation; and

(2) Railroads that provide commuter or other short-haul rail passenger service in a metropolitan or suburban area (as described by section 202(k) of the Federal Railroad Safety Act of 1970, as amended), specifically including any entity providing such service as a common carrier engaged in interstate or foreign commerce.

(b) Subparts D, E, and F do not apply to a railroad that employs not more than 15 employees covered by the Hours of Service Act (45 U.S.C. 61-64b).

§ 219.5 Definitions.

As used in this part—

(a) "Alcohol" means ethyl alcohol (ethanol). References to use or possession of alcohol include use or possession of any beverage, mixture or preparation containing ethyl alcohol.

(b) "CAMI" means the Civil Aeromedical Institute of the Federal Aviation Administration. References to

CAMI are to that organization's Toxicology Research Laboratory.

(c) "Controlled substance" has the meaning assigned by 21 U.S.C. 802 and includes all substances listed on Schedules I through V as they may be revised from time to time (21 CFR Parts 1301-1316).

(d) "Covered employee" means a person who has been assigned to perform service subject to the House of Service Act (45 U.S.C. 61-64b) during a duty tour, whether or not the person has performed or is currently performing such service, and any person performs such service.

(e) "Covered service" means service for a railroad that is subject to the Hours of Service Act (45 U.S.C. 61-64b), but does not include any period the employee is relieved of all responsibilities and is free to come and go without restriction.

(f) "Co-worker" means another employee of the railroad, including a working supervisor directly associated with a yard or train crew, such as a conductor or yard foreman, but not including any other railroad supervisor, special agent or officer.

(g) "Drug" means any substance (other than alcohol) that has known mind or function-altering effects on a human subject, specifically including any psychoactive substance and including, but not limited to, controlled substances.

(h) "EAP Counselor" means a person or persons qualified by experience, education, or training to counsel persons affected by substance abuse problems and to evaluate their progress in recovering from or controlling such problems. An "EAP counselor" may be a qualified full-time salaried employee of the railroad, a qualified practitioner who contracts with the railroad on a fee-for-service or other basis, or a qualified physician designated by the railroad to perform functions in connection with alcohol or drug abuse evaluation or counseling. As used in these rules, an EAP Counselor owes a duty to the railroad to make an honest and fully informed evaluation of the condition and progress of the employee.

(i) "Field Manual" refers to the document described in section 219.19 of this subpart.

(j) "FRA" means the Federal Railroad Administration, U.S. Department of Transportation.

(k) "FRA representative" means the Associate Administrator for Safety, FRA, the Associate Administrator's delegate (including a qualified State inspector acting under Part 212 of this chapter), the Chief Counsel, FRA, or the Chief Counsel's delegate.

(l) "Hazardous material" means a commodity designated as a hazardous material by Part 172 of this title.

(m) "Impact accident" means a train accident consisting of a head-on collision, a rear-end collision, a side collision (including a collision at a railroad crossing at grade), a switching collision, or impact with a deliberately-placed obstruction such as a bumping post. The following are not impact accidents: (1) An accident in which the derailment of equipment causes an impact with other rail equipment; and (2) impact of rail equipment with obstructions such as fallen trees, rock or snow slides, livestock, etc.

(n) "Independent" means not under the ownership or control of the railroad and not operated or staffed by a salaried officer or employee of the railroad. The fact that the railroad pays for services rendered by a medical facility or laboratory, selects that entity for performing tests under this part, or has a standing contractual relationship with that entity to perform tests under this part or perform other medical examinations or tests of railroad employees does not, by itself, remove the facility from this definition.

(o) "Medical facility" means a hospital, clinic, physician's office, or laboratory where toxicological samples can be collected according to recognized professional standards.

(p) "Medical practitioner" means a physician or dentist licensed or otherwise authorized to practice by the state.

(q) "NTSB" means the National Transportation Safety Board.

(r) "Possess" means to have on one's person or in one's personal effects or under one's control. However, the concept of possession as used in this part does not include control by virtue of presence in the employee's personal residence or other similar location off of railroad property.

(s) "Reportable injury" means an injury reportable under Part 225 of this title.

(t) "Reporting threshold" means an amount specified in § 225.19(c) of this title, as adjusted from time to time in accordance with Appendix A to Part 225 of this title.

(u) "Supervisory employee" means an officer, special agent, or other employee of the railroad who is not a co-worker and who is responsible for supervising or monitoring the conduct or performance of one or more employees.

(v) "Train," except as context requires, means a locomotive coupled, with or without cars. (A locomotive is a

self-propelled unit of equipment which can be used in train service.)

(w) "Train accident" means a passenger, freight, or work train accident described in § 225.19(c) of this title ("Rail equipment accident"), including an accident involving a switching movement.

(x) "Train incident" means an event involving the movement of railroad on-track equipment that results in a casualty but in which railroad property damage does not exceed the reporting threshold.

§ 219.7 Waivers.

(a) A person subject to a requirement of this part may petition the Federal Railroad Administration for a waiver of compliance with such requirement.

(b) Each petition for waiver under this section must be filed in the manner and contain the information required by Part 211 of this chapter.

(c) If the Administrator finds that waiver of compliance is in the public interest and is consistent with railroad safety, the Administrator may grant the waiver subject to any necessary conditions.

§ 219.9 Responsibility for compliance.

(a) A railroad that—

(1) Having actual knowledge, requires or permits an employee to go or remain on duty in covered service while in violation of § 219.101;

(2) Fails to exercise due diligence to assure compliance with § 219.101 by a covered employee;

(3) Willfully and with actual knowledge, requires an employee to submit to testing in reliance on section 219.301 without observance of the conditions and safeguards contained in subpart D of this part;

(4) Fails to adopt or publish, or willfully and with actual knowledge fails to implement, a policy required by Subpart E of this part; or

(5) Fails to comply with any other requirement of this part; shall be deemed to have violated this part and shall be subject to a civil penalty as provided in Appendix A.

(b) For purposes of paragraph (a)(1) of this section, the knowledge imputed to the railroad shall be limited to that of a railroad management employee (such as a supervisor deemed an "officer," whether or not such person is a corporate officer) or a supervisory employee in the offending employee's chain of command.

(c) The "knowledge" referred to in this section and the penalty schedule (Appendix A) is knowledge of the applicable facts. Knowledge of this part,

like other provisions of Federal law, is conclusively presumed.

§ 219.11 Consent required; implied.

(a) Any employee who performs covered service for a railroad on or after November 1, 1985, shall be deemed to have consented to testing as required in Subpart C and D of this part; and consent is implied by performance of such service.

(b) Each such employee shall participate in such testing, as required under the conditions set forth in this part by a representative of the railroad or FRA.

(c) A covered employee who is required to be tested under Subpart C or D and who is taken to a medical facility for observation or treatment after an accident or incident shall be deemed to have consented to the release to FRA of the following:

(1) The remaining portion of any body fluid sample taken by the treating facility within 12 hours of the accident or incident that is not required for medical purposes, together with any normal medical facility record(s) pertaining to the taking of such sample;

(2) The results of any laboratory tests conducted by or for the treating facility on such sample; and

(3) The identity, dosage, and time of administration of any drugs administered by the treating facility prior to the time samples were taken by the treating facility or prior to the time samples were taken in compliance with this part.

(d) An employee required to participate in body fluid testing under Subpart C (post-accident toxicological testing) shall, if requested by the representative of the railroad, FRA, or the medical facility, evidence consent to taking of samples and their release for toxicological analysis under Subpart C by promptly executing a consent form, if required by the medical facility.

(e) Nothing in this part shall be construed to authorize the use of physical coercion or any other deprivation of liberty in order to compel breath or body fluid testing.

(f) Any railroad employee who performs service for a railroad on or after November 1, 1985, shall be deemed to have consented to removal of body fluid and/or tissue samples necessary for toxicological analysis from the remains of such employee, if such employee dies within 12 hours of an accident or incident described in Subpart C as a result of such event. This consent is specifically required of employees not in covered service, as well as employees in covered service.

§ 219.13 Preemptive effect.

(a) Under section 205 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 434), issuance of these regulations preempts any State law, rule, regulation, order or standard covering the same subject matter, except a provision directed at a local hazard that is consistent with this part and that does not impose an undue burden on interstate commerce.

(b) FRA does not intend by issuance of these regulations to preempt provisions of State criminal law that impose sanctions for reckless conduct that leads to actual loss of life, injury or damage to property, whether such provisions apply specifically to railroad employees or generally to the public at large.

§ 219.15 Alcohol concentrations in blood and breath.

(a) In this part, blood alcohol concentration (BAC) is expressed as a "percentage" weight to volume. For example, a BAC of ".04 percent" means that there is .04 gram (four hundredths of one gram) of alcohol in 100 milliliters of whole blood. This is the same quantity as "40 milligrams percent" (40 milligrams in 100 milliliters).

(b) For the purpose of determining blood alcohol concentration through an analysis of the breath, the amount of alcohol in one part of blood shall be presumed to equal the amount of alcohol in 2100 parts of an expired breath sample (by volume).

§ 219.17 Construction.

Nothing in this part—

(a) Restricts the power of FRA to conduct investigations under section 208 of the Federal Railroad Safety Act of 1970, as amended; or

(b) Creates a private right of action on the part of any person for enforcement of the provisions of this part or for damages resulting from noncompliance with this part.

§ 219.19 Field Manual.

(a) Technical procedures for post-accident testing required by Subpart C of this part, recommended practice standards for breath and urine testing under Subpart D of this part, and related materials designed to assist the railroads in establishing programs for control of alcohol and drug use are contained in the FRA Alcohol and Drug Field Manual which is revised from time to time by the Office of Safety, FRA.

(b) The Field Manual may be inspected at the Office of the Associate Administrator for Safety, FRA, 400 Seventh Street, SW., Washington, D.C.

20590. The Field Manual may be purchased the National Technical Information Service, Order Department, 5285 Port Royal Road, Springfield, Virginia 22161.

§ 219.21 [Reserved]

Subpart B—Prohibitions

§ 219.101 Alcohol and drug use prohibited.

(a) *Prohibitions.* Except as provided in § 219.103—

(1) No employee may use or possess alcohol or any controlled substance while assigned by a railroad to perform covered service;

(2) No employee may report for covered service, or go or remain on duty in covered service while—

(i) Under the influence of or impaired by alcohol;

(ii) Having .04 percent or more alcohol in the blood; or

(iii) Under the influence of or impaired by any controlled substance.

(b) *Controlled substance.* "Controlled substance" is defined by § 219.5 of this part. Controlled substances are grouped as follows: marijuana, narcotics (such as heroin and codeine) stimulants (such as cocaine and amphetamines), depressants (such as barbiturates and minor tranquilizers), and hallucinogens (such as the drugs known as PCP and LSD). Controlled substances include illicit drugs (Schedule I), drugs that are required to be distributed only by a medical practitioner's prescription or other authorization (Schedules II through IV, and some drugs on Schedule V), and certain preparations for which distribution is through documented over the counter sales (Schedule V only).

(c) *Railroad rules.* Nothing in this section restricts a railroad from imposing an absolute prohibition on the presence of alcohol or any drug in the body fluids of persons in its employ, whether in furtherance of the purpose of this part or for other purposes.

(d) *Construction.* This section shall not be construed to prohibit the presence of an unopened container of an alcoholic beverage in a private motor vehicle that is not subject to use in the business of the railroad; nor shall it be construed to restrict a railroad from prohibiting such presence under its own rules.

§ 219.103 Prescribed and over-the-counter drugs.

(a) This subpart does not prohibit the use of a controlled substance (on Schedule II through V of the controlled substance list) prescribed or authorized by a medical practitioner, or possession incident to such use, if—

(1) The treating medical practitioner or a physician designated by the railroad has made a good faith judgment, with notice of the employee's assigned duties and on the basis of the available medical history, that use of the substance by the employee at the prescribed or authorized dosage level is consistent with the safe performance of the employee's duties; and

(2) The substance is used at the dosage prescribed or authorized.

(b) This subpart does not restrict any discretion available to the railroad to require that employees notify the railroad of therapeutic drug use or obtain prior approval for such use.

Subpart C—Post-Accident Toxicological Testing

§ 219.201 Events for which testing is required.

(a) *List of events.* On and after December 1, 1985, except as provided in paragraph (b) of this section, post-accident toxicological tests shall be conducted after any event that involves one or more of the circumstances described in paragraph (a) (1) through (3) of this section:

(1) *Major train accident.* Any train accident that involves one or more of the following:

(i) A fatality;

(ii) Release of a hazardous material accompanied by—

(A) An evacuation; or

(B) A reportable injury resulting from the hazardous material release (e.g., from fire, explosion, inhalation, or skin contact with the material); or

(iii) Damage to railroad property of \$500,000 or more.

(2) *Impact accident.* An impact accident resulting in—

(i) A reportable injury; or

(ii) Damage to railroad property of \$50,000 or more.

(3) *Fatal train incident.* Any train incident that involves a fatality to any on-duty railroad employee.

(b) *Exception.* No test shall be required in the case of a collision between railroad rolling stock and a motor vehicle or other highway conveyance at a rail/highway grade crossing.

(c) *Good faith determinations.* (1) The railroad representative responding to the scene of the accident/incident shall determine whether the accident/incident falls within the requirements of paragraph (a) of this section or is within the exception described in paragraph (b) of this section. It is the duty of the railroad representative to make reasonable inquiry into the facts as necessary to make such determinations.

In making such inquiry, the railroad representative shall consider the need to obtain samples as soon as practical in order to determine the presence or absence of impairing substances reasonably contemporaneous with the accident/incident. The railroad representative satisfies the requirement of this section if, after making reasonable inquiry, the representative exercises good faith judgment in making the required determinations.

(2) A railroad is not in violation of this subpart if its representative has made such reasonable inquiry and exercised such good faith judgment but nevertheless errs in determining that post-accident testing is not required.

(3) A railroad does not act in excess of its authority under this subpart if its representative has made such reasonable inquiry and exercised such good faith judgment, but its later determined, after investigation, that one or more of the conditions thought to have required testing were not, in fact, present.

§ 219.203 Responsibilities of railroads and employees.

(a) *Employees tested.* (1) Following each accident and incident described in § 219.201, the railroad (or railroads) shall take all practicable steps to assure that all covered employees of the railroad directly involved in the accident or incident provide blood and urine samples for toxicological testing by FRA.

(2) Such employees shall specifically include each and every operating employee assigned as a crew member of any train involved in the accident or incident. In any case where an operator, dispatcher, signal maintainer or other covered employee is directly and contemporaneously involved in the circumstances of the accident/incident, those employees shall also be required to provide samples.

(3) An employee is excluded from testing under the following circumstances:

(i) In any case of an accident/incident for which testing is mandated only under § 219.201(a)(2) of this subpart (an "impact accident") or § 219.201(a)(3) ("fatal train incident"), if the railroad representative can immediately determine, on the basis of specific information, that the employee had no role in the cause(s) of the accident/incident.

(ii) The following provisions govern accidents/incidents involving non-covered employees:

(A) Surviving non-covered employees are not subject to testing under this subpart.

(B) Testing of the remains of non-covered employees who are fatally injured in train accidents and incidents is required.

(b) *Timely sample collection.* (1) The railroad shall make every reasonable effort to assure that samples are provided as soon as possible after the accident or incident.

(2) This paragraph shall not be construed to inhibit the employees required to be tested from performing, in the immediate aftermath of the accident or incident, any duties that may be necessary for the preservation of life or property. However, where practical, the railroad shall utilize other employees to perform such duties.

(3) In the case of a revenue passenger train which is in proper condition to continue to the next station or its destination after an accident or incident, the railroad shall consider the safety and convenience of passengers in determining whether the crew is immediately available for testing. A relief crew shall be called to relieve the train crew as soon as possible.

(c) *Place of sample collection.* (1) Employees shall be transported to an independent medical facility where the samples shall be obtained. In all cases blood shall be drawn only by a qualified medical professional or by a qualified technician subject to the supervision of a qualified medical professional.

(2) In the case of an injured employee, the railroad shall request the treating medical facility to obtain the samples.

(d) *Obtaining cooperation of facility.*

(1) In seeking the cooperation of a medical facility in obtaining a sample under this subpart, the railroad shall, as necessary, make specific reference to the requirements of this subpart.

(2) If an injured employee is unconscious or otherwise unable to evidence consent to the procedure and the treating medical facility declines to obtain a blood sample after having been acquainted with the requirements of this subpart, the railroad shall immediately notify FRA by toll free telephone, Area Code 800-424-0201, stating the employee's name, the medical facility, its location, the name of the appropriate decisional authority at the medical facility, and the telephone number at which that person can be reached. FRA will then take appropriate measures to assist in obtaining the required sample.

(e) *Discretion of physician.* Nothing in this subpart shall be construed to limit the discretion of a physician to determine whether drawing a blood sample is consistent with the health of

an injured employee or an employee afflicted by any other condition that may preclude drawing the specified quantity of blood.

§ 219.205 Sample collection and handling.

(a) *General.* Samples shall be obtained, marked, preserved, handled, and made available to FRA consistent with the requirements of this section and the Field Manual.

(b) *Information requirements.* In order to process samples, analyze the significance of laboratory findings, and notify the railroads and employees of test results, it is necessary to obtain basic information concerning the accident/incident and any treatment administered after the accident/incident. Accordingly, the railroad representative shall complete the information required by FRA Form 6180.73 for shipping with the samples. Each employee subject to testing shall cooperate in completion of the required information on FRA Form 6180.74 for inclusion in the shipping kit and processing of the samples. The railroad representative shall request an appropriate representative of the medical facility to complete the remaining portion of the information on each Form 6180.74. One Form 6180.73 shall be forwarded in the shipping kit with each group of samples. One Form 6180.74 shall be forwarded in the shipping kit for each employee who provides samples.

(c) *Shipping kit.* (1) FRA and CAMI prepare and make available for purchase a limited number of standard shipping kits for the purpose of routine handling of toxicological samples under this subpart. Whenever possible, samples shall be placed in the shipping kit prepared for shipment according to the instructions provided in the kit and the Field Manual. Specifications for kits are contained in the Field Manual.

(2) Kits may be ordered directly from CAMI. The address is Forensic Toxicology Laboratory (AAC-114), Civil Aeromedical Institute, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 S. MacArthur Blvd., Oklahoma City, Oklahoma 73125.

(3) FRA maintains a limited number of kits at its field offices. A Class III railroad may utilize kits in FRA possession, rather than maintaining such kits on its property.

(d) *Shipment.* Samples shall be shipped by pre-paid air freight (or other means adequate to ensure delivery within twenty-four (24) hours) to the Toxicology Laboratory, Civil Aeromedical Institute, Oklahoma City, Oklahoma 73125. If courier pickup is not available at the medical facility where

the samples are collected, the railroad shall promptly transport the shipping kit holding the samples to the nearest point of shipment via air freight or equivalent means.

§ 219.207 Fatality.

(a) In the case of an employee fatality in an accident or incident described in § 219.201, body fluid and/or tissue samples shall be obtained from the remains of the employee for toxicological testing. To ensure that samples are timely collected, the railroad shall immediately notify the appropriate local authority (such as a coroner or medical examiner) of the fatality and the requirements of this subpart, making available the shipping kit and requesting the local authority to assist in obtaining the necessary body fluid or tissue samples. The railroad shall also seek the assistance of the custodian of the remains, if a person other than the local authority.

(b) If the local authority or custodian of the remains declines to cooperate in obtaining the necessary samples, the railroad shall immediately notify FRA by toll free telephone, Area Code 800-424-0201, providing the following information:

(1) Date and location of the accident or incident;

(2) Railroad;

(3) Name of the deceased;

(4) Name and telephone number of custodian of the remains; and

(5) Name and telephone number of local authority contacted.

(c) A coroner, medical examiner, pathologist, Aviation Medical Examiner, or other qualified professional is authorized to remove the required body fluid and/or tissue samples from the remains on request of the railroad or FRA pursuant to this part; and, in so acting, such person is the delegate of the Administrator under section 208 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 437) (but not the agent of the Secretary for purposes of the Federal Tort Claims Act). Such qualified professional may rely upon the representations of the railroad or FRA representative with respect to the occurrence of the event requiring that toxicological tests be conducted and the coverage of the deceased employee under these rules.

(d) The Field Manual specifies body fluid and/or tissue samples required for toxicological analysis in the case of a fatality.

§ 219.209 Reports of tests and refusals.

(a)(1) A railroad that has experienced one or more events for which samples

were obtained shall provide prompt telephonic notification summarizing such events. Notification shall be provided to the Office of Safety FRA, at (202) 426-0897 (8:30 a.m. to 5:00 p.m. EST or EDT) during the Federal work week.

(2) Each telephonic report shall contain:

- (i) Name of railroad;
- (ii) Name, title and telephone number of person making the report;
- (iii) Time, date and location of the accident/incident;
- (iv) Brief summary of the circumstances of the accident/incident, including basis for testing; and
- (v) Number, names and occupations of employees tested.

(b) If the railroad is unable, as a result of non-cooperation of an employee or for any other reason, to obtain a sample and cause it to be provided to FRA as required by this section, the railroad shall make a concise narrative report of the reason for such failure and, if appropriate, any action taken in response to the cause of such failure. This report shall be appended to the report of the accident/incident required to be submitted under Part 225 of this subchapter.

§ 219.211 Analysis and follow-up.

(a) (1) CAMI undertakes prompt analysis of samples provided under this subpart, consistent with the need to develop all relevant information and produce a complete report.

(2) FRA notifies the railroad and the tested employee of the results of the toxicological analysis and permits the employee to respond in writing to the results of the test prior to preparing any final investigation report concerning the accident or incident. Results of the toxicological analysis and any response from the employee are also promptly made available to the National Transportation Safety Board on request.

(b) (1) The toxicology report may contain a statement of pharmacological significance to assist FRA and other parties in understanding the data reported. No such statement may be construed as a finding of probable cause in the accident or incident.

(2) The toxicology report is a part of the report of the accident/incident and therefore subject to the limitation of section 4 of the Accident Reports Act (45 U.S.C. 41) (prohibiting use of the report for any purpose in any action for damages).

(c) (1) It is in the public interest to ensure that any railroad disciplinary actions that may result from accidents and incidents for which testing is required under this subpart are disposed of on the basis of the most complete and

reliable information available so that responsive action will be appropriate. Therefore, during the interval between an accident or incident and the date that the railroad receives notification of the results of the toxicological analysis, any provisions of collective bargaining agreements establishing maximum periods for charging employees with rule violations, or for holding an investigation, shall not be deemed to run as to any offense involving the accident or incident (*i.e.*, such periods shall be tolled).

(2) This provision shall not be construed to excuse the railroad from any obligation to timely charge an employee (or provide other actual notice) where the railroad obtains sufficient information relating to alcohol or drug use, impairment or possession of other rule violations prior to receipt of toxicological analysis.

(3) This provision does not authorize holding any employee out of service pending receipt of toxicological analysis; nor does it restrict a railroad from taking such action in an appropriate case.

(d) Each sample provided under this subpart is retained for not less than six months following the date of the accident or incident and may be made available to the National Transportation Safety Board (on request) or to a party in litigation upon service of appropriate compulsory process on the custodian of the sample at least ten (10) days prior to the return date of such process. It is the policy of FRA to request the Attorney General to oppose production of the sample to a party in litigation unless a copy of the subpoena, order, or other process is contemporaneously served on the Chief Counsel, FRA, Washington, D.C.

§ 219.213 Unlawful refusals; consequences.

(a) *Disqualification.* (1) An employee who refuses to cooperate in providing a blood or urine sample following an accident or incident specified in this section shall be withdrawn from covered service and shall be deemed disqualified for covered service for a period of nine (9) months.

(2) The disqualification required by this paragraph shall apply with respect to employment in covered service by any railroad with notice of such disqualification.

(3) The requirement of disqualification for nine (9) months does not limit any discretion on the part of the railroad to impose additional sanctions for the same or related conduct.

(b) *Procedures.* (1) Prior to or upon withdrawing the employee from covered

service under this section, the railroad shall provide notice of the reason for this action and an opportunity for hearing before a presiding officer other than the charging official. This hearing may be consolidated with any other disciplinary hearing arising from the same accident or incident (or conduct directly related thereto), but the presiding officer shall make separate findings as to the disqualification required by this section.

(2) The hearing shall be convened within the period specified in the applicable collective bargaining agreement. In the absence of an agreement provision, the employee may demand that the hearing be convened within 10 calendar days of the suspension or, in the case of an employee who is unavailable due to injury, illness, or other sufficient cause, within 10 days of the date the charged employee becomes available for hearing.

(3) A post-suspension proceeding conforming to the requirements of an applicable collective bargaining agreement, together with the provisions for adjustment of disputes under section 3 of the Railway Labor Act, shall be deemed to satisfy the procedural requirements of this paragraph.

(c) *Subject of hearing.* The hearing required by this section shall determine whether the employee refused to submit to testing, having been requested to submit, under authority of this subpart, by a representative of the railroad or an FRA representative. In determining whether a disqualification is required, the hearing official shall, as appropriate, also consider the following:

(1) Whether the railroad made a good faith determination, based on reasonable inquiry, that the accident or incident was within the mandatory testing requirements of this subpart; and

(2) In a case where a blood test was refused on the ground it would be inconsistent with the employee's health, whether such refusal was made in good faith and based on medical advice.

Subpart D—Authorization to Test for Cause

§ 219.301 Testing for reasonable cause.

(a) *Authorization.* A railroad may, under the conditions specified in this subpart, require any covered employee, as a condition of employment in covered service, to cooperate in breath or urine testing, or both, to determine compliance with § 219.101 of this part of a railroad rule implementing the requirements of § 219.101. This authority is limited to testing after observations or events that

occur during duty hours (including any period of overtime or emergency service). The provisions of this subpart apply only when, and to the extent that, the test in question is conducted in reliance upon the authority conferred by this section.

(b) *Reasonable cause for breath tests.* The following circumstances constitute reasonable cause for the administration of breath tests under this section:

(1) *Reasonable suspicion.* A supervisory employee of the railroad has a reasonable suspicion that the employee is currently under the influence of or impaired by alcohol, or alcohol in combination with a controlled substance, based upon specific, personal observations that the supervisory employee can articulate concerning the appearance, behavior, speech or body odors of the employee;

(2) *Accident/incident.* The employee has been involved in an accident or incident reportable under Part 225 of this title, and a supervisory employee of the railroad has a reasonable suspicion that the employee's acts or omissions contributed to the occurrence or severity of the accident or incident; or

(3) *Rule violation.* The employee has been directly involved in one of the following operating rule violations or errors:

(i) Noncompliance with a train order, track warrant, timetable, signal indication, special instruction or other direction with respect to movement of a train that involves—

(A) Occupancy of a block or other segment of track to which entry was not authorized;

(B) Failure to clear a track to permit opposing or following movement to pass;

(C) Moving across a railroad crossing at grade without authorization; or

(D) Passing an absolute restrictive signal or passing a restrictive signal without stopping (if required);

(ii) Failure to protect a train as required by a rule consist with § 218.37 of this title;

(iii) Operation of a train at a speed that exceeds the maximum authorized speed by at least ten (10) miles per hour or by fifty percent (50%) of such maximum authorized speed, whichever is less;

(iv) Alignment of a switch in violation of a railroad rule or operation of a switch under a train;

(v) Failure to apply or stop short of derail as required;

(vi) Failure to secure a hand brake or failure to secure sufficient hand brakes; or

(vii) In the case of a person performing a dispatching function or

block operator function, issuance of a train order or establishment of a route that fails to provide proper protection for a train.

(c) *Reasonable cause for urine test—*

(1) *Accident/incident and rule violation.* Except as provided in paragraph (c)(2) of this section, each of the conditions set forth in paragraphs (b)(2) ("accident/incident") and (b)(3) ("rule violation") of this section as constituting reasonable cause for breath testing also constitutes reasonable cause with respect to urine testing.

(2) *Reasonable suspicion.* Reasonable cause also exists where a supervisory employee of the railroad has a reasonable suspicion that the employee is currently under the influence of or impaired by alcohol or a controlled substance, based upon specific, personal observations that the supervisory employee can articulate concerning the appearance, behavior, speech, or body odors of the employee, subject to the following limitations:

(i) An employee may be required to submit to urine testing for reasonable suspicion only if the determination is made by at least two supervisory employees; and

(ii) If the determination to require urine testing is based upon suspicion that the employee is under the influence of or impaired by a controlled substance, at least one supervisory employee responsible for the decision to require urine testing must have received at least three (3) hours of training in the signs of drug intoxication consistent with a program of instruction on file with FRA under Part 217 of this title. Such program shall, at a minimum, provide information concerning the acute behavioral and apparent physiological effects of the major drug groups on the controlled substances list (narcotics, depressants, stimulants, hallucinogens, and marijuana).

(d) *Preference for breath test where alcohol suspected.* If an employee is specifically suspected only of being under the influence of or impaired by alcohol, breath testing is the preferred means of confirmation. The railroad shall conduct a breath test before requiring a urine test unless to do so would not be feasible because of unavailability of a testing device or other considerations of safety or efficiency.

(e) *Limitation for Subpart C events.* The compulsory urine testing authority conferred by this section does not apply with respect to any event subject to post-accident toxicological testing as required by § 219.201 of this part. However, use of compulsory breath test authority is authorized in any case

where breath test results can be obtained in a timely manner at the scene of the accident and conduct of such tests does not materially impede the collection of samples under Subpart C.

(f) *Time limitation.* Nothing in this section shall authorize testing of an employee after the expiration of an 8-hour period from the time of the observations or other events described in this section.

(g) *Construction.* Nothing in this subpart requires a railroad to undertake breath testing as a requisite to any disciplinary action or restricts the discretion of a railroad to proceed based solely on evidence of behavior, personal observations, or other evidence customarily relied upon in such investigations or hearings.

§ 219.303 Breath test procedures and safeguards.

(a) Except as provided in paragraph (d) of this section, the following conditions apply to breath testing authorized by this subpart.

(1) Testing devices shall be selected from among those listed on the Conforming Products List of Evidential Breath Measurement Devices amended and published in the Federal Register from time to time by the National Highway Traffic Safety Administration (NHTSA), Department of Transportation. This listing is also contained in the current Field Manual.

(2) Each device shall be properly maintained and shall be calibrated by use of a calibrating unit listed on the NHTSA Conforming Products List of Calibrating Units for Breath Alcohol Testers (as amended and published and contained in the current Field Manual) with sufficient frequency to ensure the accuracy of the device (within plus or minus .01 percent), but not less frequently than provided in the manufacturer's instructions.

(3) Tests shall be conducted by a trained and qualified operator. The operator shall have received training on the operational principles of the particular instrument employed and practical experience in the operation of the device and use of the breath alcohol calibrating unit (reference standard). A copy of the training program shall be filed with FRA in conjunction with the filing required by § 217.11 of this title.

(4) Tests shall be conducted in accordance with procedures specified by the manufacturer of the testing device, consistent with sound technical judgment, and shall include appropriate restrictions on ambient air temperature.

(5) If an initial test is positive, the employee shall be tested again after the

expiration of a period of not less than 15 minutes, in order to confirm that the test has properly measured the alcohol content of deep lung air.

(b) Because of the inherent limitations of the instrumentation, any indicated breath test result of less than .02 percent shall be deemed a negative test.

(c) In any case where a breath test is intended for use in the railroad disciplinary process and the result is positive, the employee shall be given the prompt opportunity to provide a blood sample at an independent medical facility for analysis by a competent independent laboratory. The railroad shall provide the required transportation to facilitate the blood test.

(d)(1) Under the circumstances set forth in § 219.301, a railroad may require an employee to participate in a screening test solely for the purpose of determining whether the conduct of a test meeting the criteria of paragraph (a) of this section is indicated. If the screening test is negative within the meaning of paragraph (b) of this section, the employee shall not be required to submit to further testing under this subpart. If the screening test is positive, no consequence shall attach except that the employee may be removed from covered service for the period necessary to conduct a breath test meeting the criteria of paragraph (a) of this section or a urine test meeting the requirements of §§ 219.305 and 219.307 of this subpart (consistent with § 219.301(d) of this subpart).

(2) The conduct of a screening test shall not excuse the requirement of paragraph (a) of this section that at least two breath samples be tested, but the requirement that a 15-minute interval elapse between tests shall be deemed to be satisfied if the second test meeting the criteria of paragraph (a) of this section is conducted at least 15 minutes after the screening test.

§ 219.305 Urine test procedures and safeguards.

(a) Urine shall be collected at an independent medical facility. Personnel of the medical facility shall supervise the collection procedure.

(b) The railroad shall establish procedures with the medical facility and the laboratory selected for testing to ensure positive identification of each sample and accurate reporting of laboratory results.

(c) A urine test procedure may include the provision of not more than two samples from the same employee.

(d) In any case where a urine test is intended for use in the railroad disciplinary process, the employee shall be given the opportunity to provide a

blood sample at the independent medical facility for analysis by a competent independent laboratory.

(e) Nothing in this subpart restricts any discretion available to the railroad to request or require that an employee cooperate in additional body fluid testing.

§ 219.307 Standards for urine assays.

(a) *Laboratory standards.* A railroad employing the urine testing authority conferred by this subpart shall ensure that—

(1) Urine testing authorized by this part shall be undertaken only by an independent laboratory (or laboratories) proficient in the testing of urine for alcohol and drugs of abuse.

(2) Each such laboratory that performs a confirmatory procedure under paragraph (b) of this section shall regularly participate in an external quality control program that involves the analysis of samples submitted by a reference laboratory. Quality control samples should include actual body fluid samples previously analyzed by the reference laboratory, and should not be limited to spiked samples. Where practicable, known samples shall be submitted to the laboratory on a blind basis (so that the source of the sample is believed to be a customer of the laboratory).

(b) *Screening and confirmation.* Each sample shall be analyzed by a method that is reliable within known tolerances. If the screening test is positive for a substance other than alcohol, a remaining portion of the same sample shall be retested by another method. The confirmation test shall utilize a scientifically-recognized method capable of providing quantitative data specific to the drug (or metabolite(s)) detected. An immunoassay (including a radio immunoassay) is not an acceptable confirmatory test for this purpose.

(c) *Laboratory reports.* (1) Reports of positive urine tests shall, at minimum, state (i) the type of test conducted, both for screening and confirmation, (ii) the results of each test, (iii) the sensitivity (cut-off point) of the methodology employed for confirmation, and (iv) any available information concerning the margin of accuracy and precision of the quantitative data reported for the confirmation test (or, in the case of alcohol, for the single test procedure). However, in the case of a negative test (either for screening or confirmation), the report shall specify only that the test was negative for the particular substance.

(2) A legible copy of the laboratory report shall promptly be made available to the employee tested.

§ 219.309 Presumption of impairment; notice.

(a) If an employee's urine sample has tested positive for a controlled substance (or its metabolite(s)) in a test authorized by this subpart and the employee was afforded and declined the opportunity to provide a blood sample, the railroad (or a board of arbitration) may, in the absence of persuasive evidence to the contrary, presume from the presence of the identified controlled substance that the employee was impaired by that controlled substance within the meaning of § 219.101 of this subpart.

(b)(1) Each railroad that utilizes the urine testing authority conferred by this subpart shall provide effective notice of the presumption created by this section to each of its covered employees. A railroad is deemed to have provided such notice if it includes a statement similar in substance to the statement set forth in paragraph (b)(2) of this section in its book of rules, timetable, special instructions, or other publication that is made available to each covered employee and with which each such employee is required to be familiar.

(2) The following statement provides the required notice:

Under Federal Railroad Administration (FRA) safety regulations, you may be required to provide a urine sample after certain accidents and incidents or at any time the company reasonably suspects that you are under the influence of, or impaired by, drugs while on duty. Because of its sensitivity, the urine test may reveal whether or not you have used certain drugs within the recent past (in a rare case, up to sixty days before the sample is collected). As a general matter, the test cannot distinguish between recent use off the job and current impairment. However, the Federal regulations provide that if only the urine test is available, a positive finding on that test will support a presumption that you were impaired at the time the sample was taken.

You can avoid this presumption of impairment by demanding to provide a blood sample at the same time the urine sample is collected. The blood test will provide information pertinent to current impairment. Regardless of the outcome of the blood test, if you provide a blood sample there will be no presumption of impairment from a positive urine test.

If you have used any drug off the job (other than a medication that you possessed lawfully) in the prior sixty days, it may be in your interest to provide a blood sample. If you have not made unauthorized use of any drug in the prior sixty days, you can expect that the urine test will be negative; and you may not wish to provide a blood sample.

You are not required to provide a blood sample at any time, except in the case of certain accidents and incidents subject to Federal post-accident testing requirements (49 CFR Part 219, Subpart C).

A complete copy of the Federal regulations is available for your review at _____.

(3) A railroad that has a policy that forbids off-the-job use of drugs (not involving a specific proof that the employee is under the influence of the substance or impaired by it on the job) must include in such a notice a statement concerning any additional consequences of a positive urine test.

Subpart E—Identification of Troubled Employees

§ 219.401 Requirement for policies.

(a) The purpose of this subpart is to prevent the use of alcohol and drugs in connection with covered service.

(b) Each railroad shall adopt, publish and implement—

(1) A policy designed to encourage and facilitate the identification of those covered employees who abuse alcohol or drugs as a part of a treatable condition and to ensure that such employees are provided the opportunity to obtain counseling or treatment before those problems manifest themselves in detected violations of this part (hereafter "voluntary referral policy"); and

(2) A policy designed to foster employee participation in preventing violations of this subpart and encourage co-worker participation in the direct enforcement of this part (hereafter "co-worker report policy").

(c) A railroad may comply with this subpart by adopting, publishing and implementing policies meeting the specific requirements of §§ 219.403 and 219.405 of this subpart or by complying with § 219.407.

(d) If a railroad complies with this part by adopting, publishing and implementing policies consistent with §§ 219.403 and 219.405, the railroad shall make such policies, and publications announcing such policies, available for inspection and copying by FRA.

(e) Nothing in this subpart shall be construed to—

(1) Require payment of compensation for any period an employee is out of service under a voluntary referral or co-worker report policy;

(2) Require a railroad to adhere to a voluntary referral or co-worker report policy in a case where the referral or report is made for the purpose, or with the effect, of anticipating the imminent and probable detection of a rule violation by a supervisory employee; or

(3) Limit the discretion of a railroad to dismiss or otherwise discipline an employee for specific rule violations or criminal offenses, except as specifically provided by this subpart.

§ 219.403 Voluntary referral policy.

(a) *Scope.* This section prescribes minimum standards for voluntary referral policies. Nothing in this section restricts a railroad from adopting, publishing and implementing a voluntary referral policy that affords more favorable conditions to employees troubled by alcohol or drug abuse problems, consistent with the railroad's responsibility to prevent violations of § 219.101.

(b) *Required provisions.* A voluntary referral policy shall include the following provisions:

(1) A covered employee who is affected by an alcohol or drug use problem may maintain an employment relationship with the railroad if, before the employee is charged with conduct deemed by the railroad sufficient to warrant dismissal, the employee seeks assistance through the railroad for the employee's alcohol or drug use problem or is referred for such assistance by another employee or by a representative of the employee's collective bargaining unit. The railroad shall specify whether, and under what circumstances, its policy provides for the acceptance of referrals from other sources, including (at the option of the railroad) supervisory employees.

(2) Except as may be provided under paragraph (c) of this section, the railroad treats the referral and subsequent handling, including counseling and treatment, as confidential.

(3) The railroad will, to the extent necessary for treatment and rehabilitation, grant the employee a leave of absence from the railroad for the period necessary to complete primary treatment and establish control over the employee's alcohol or drug problem. The policy must allow a leave of absence of not less than 45 days, if necessary for the purpose of meeting initial treatment needs.

(4) Except as may be provided under paragraph (c)(2) of this section, the employee will be returned to service on the recommendation of the EAP Counselor. Approval to return to service may not be unreasonably withheld.

(c) *Optional provisions.* A voluntary referral policy may include any of the following provisions, at the option of the railroad:

(1) The policy may provide that the rule of confidentiality is waived if (i) the employee at any time refuses to

cooperate in a recommended course of counseling or treatment and/or (ii) the employee is later determined, after investigation, to have been involved in an alcohol or drug-related disciplinary offense growing out of subsequent conduct.

(2) The policy may require successful completion of a return-to-service medical examination as a further condition on reinstatement in covered service.

(3) The policy may provide that it does not apply to an employee who has previously been assisted by the railroad under a policy or program substantially consistent with this section or who has previously elected to waive investigation under section 219.405 of this section (co-worker report policy).

(4) The policy may provide that, in order to invoke its benefits, the employee must report to the contact designated by the railroad either (1) during non-duty hours (i.e., at a time when the employee is off duty) or (ii) while unimpaired and otherwise in compliance with the railroad's alcohol and drug rules consistent with this subpart.

§ 219.405 Co-worker report policy.

(a) *Scope.* This section prescribes minimum standards for co-worker report policies. Nothing in this section restricts a railroad from adopting, publishing and implementing a policy that affords more favorable conditions to employees troubled by alcohol or drug abuse problems, consistent with the railroad's responsibility to prevent violations of § 219.101.

(b) *Employment relationship.* A co-worker report policy shall provide that a covered employee may maintain an employment relationship with the railroad following an alleged first offense under these rules or the railroad's alcohol and drug rules, subject to the conditions and procedures contained in this section.

(c) *General conditions and procedures.* (1) The alleged violation must come to the attention of the railroad as a result of a report by a co-worker that the employee was apparently unsafe to work with or was, or appeared to be, in violation of this part or the railroad's alcohol and drug rules.

(2) If the railroad representative determines that the employee is in violation, the railroad may immediately remove the employee from service in accordance with its existing policies and procedures.

(3) The employee must elect to waive investigation on the rule charge and

must contact the EAP Counselor within a reasonable period specified by the policy.

(4) The EAP Counselor must schedule necessary interviews with the employee and complete an evaluation within 10 calendar days of the date on which the employee contacts the counselor with a request for evaluation under the policy, unless it becomes necessary to refer the employee for further evaluation. In each case, all necessary evaluations must be completed within 20 days of the date on which the employee contacts the counselor.

(d) *When treatment is required.* If the EAP Counselor determines that the employee is affected by psychological or chemical dependence on alcohol or a drug or by another identifiable and treatable mental or physical disorder involving the abuse of alcohol or drugs as a primary manifestation, the following conditions and procedures shall apply:

(1) The railroad must, to the extent necessary for treatment and rehabilitation, grant the employee a leave of absence from the railroad for the period necessary to complete primary treatment and establish control over the employee's alcohol or drug problem. The policy must allow a leave of absence of not less than 45 days, if necessary for the purpose of meeting initial treatment needs.

(2) The employee must agree to undertake and successfully complete a course of treatment deemed acceptable by the EAP Counselor.

(3) The railroad must promptly return the employee to service, on recommendation of the EAP Counselor, when the employee has established control over the substance abuse problem. Return to service may also be conditioned on successful completion of a return-to-service medical examination. Approval to return to service may not be unreasonably withheld.

(4) Following return to service, the employee, as a further condition on withholding of discipline, may, as necessary, be required to participate in a reasonable program of follow-up treatment for a period not to exceed two years from the date the employee was originally withdrawn from service.

(e) *When treatment is not required.* If the EAP Counselor determines that the employee is not affected by an identifiable and treatable mental or physical disorder—

(1) The railroad shall return the employee to service within 5 days after completion of the evaluation.

(2) During or following the out-of-service period, the railroad may require

the employee to participate in a program of education and training concerning the effects of alcohol and drugs on occupational or transportation safety.

§ 219.407 Alternate policies.

(a) In lieu of a policy under § 219.403 (voluntary referral) or § 219.405 (co-worker report), or both, a railroad may adopt, publish and implement, with respect to a particular class or craft of covered employees, an alternate policy or policies having as their purpose the prevention of alcohol or drug use in railroad operations, if such policy or policies has the written concurrence of the recognized representatives of such employees.

(b) The concurrence of recognized employee representatives in an alternate policy may be evidenced by a collective bargaining agreement or any other document describing the class or craft of employees to which the alternate policy applies. The agreement or other document must make express reference to this part and to the intention of the railroad and employee representatives that the alternate policy shall apply in lieu of the policy required by section 219.403, section 219.405, or both.

(c) The railroad shall file the agreement or other document described in paragraph (b) of this section with the Associate Administrator for Safety, FRA. If the alternate policy is amended or revoked, the railroad shall file a notice of such amendment or revocation at least 30 days prior to the effective date of such action.

(d) This section does not excuse a railroad from adopting, publishing and implementing the policies required by §§ 219.403 and 219.405 with respect to any group of covered employees not within the coverage of an appropriate alternate policy.

Subpart F—Pre-employment Drug Screens

§ 219.501 Pre-employment drug screens.

(a) On and after March 1, 1986, each applicant who is given favorable consideration for a position with a railroad that involves the performance of covered service shall be tested for the presence of drugs. The test shall be accomplished through analysis of a urine sample. Whenever feasible, the sample shall be obtained in connection with a pre-employment medical examination.

(b) Prior to collection of the urine sample, the applicant shall be notified that the sample will be tested for the presence of drugs. In the case of an

applicant who declines to be tested and withdraws the application for employment, no record shall be maintained of the declination.

(c) The railroad shall cause the samples obtained under this section to be identified, preserved, and tested by a competent laboratory for the presence of drugs, including, at a minimum, the following substances: opiates (narcotics), cocaine, barbiturates, amphetamines, cannabis, phencyclidine (PCP), and any other drug of abuse identified by the railroad medical officer as in frequent use in the locality (for which a reliable screening method is available). The railroad may also test the sample for the presence of alcohol.

(d) If the first test of a sample is positive for any drug (or metabolite(s)), the sample shall be tested a second time by another, reliable method that is specific for the substance detected.

§ 219.503 Notification; records.

(a) The railroad shall notify the applicant of the results of any test that is positive for any substance included in the procedure. In the case of a positive result, the railroad shall provide the applicant with an opportunity to explain the presence of the identified substance prior to taking any action on the application for employment. This requirement is satisfied if the railroad has, in connection with the medical examination or sample collection procedure, requested that the applicant provide information concerning all drugs or medications used within the previous 60 days.

(b) Each railroad shall retain records of tests conducted under this section for at least 2 years and make them available to FRA for review. Such records need not reflect the identity of any applicant whose application for employment in covered service was denied.

§ 219.505 Refusals.

An applicant who has refused to submit to pre-employment testing under this section shall not be employed in covered service based upon the application and examination with respect to which such refusal was made. This section does not create any right on the part of the applicant to have a subsequent application considered; nor does it restrict the discretion of the railroad to entertain a subsequent application for employment from the same person.

APPENDIX A.—SCHEDULE OF CIVIL PENALTIES¹

Section	Violation	Intentional violations ²
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Subpart B—Prohibition

219.101	Employee required or permitted to use or possess alcohol or controlled substance while on duty, or to go or remain on duty while under the influence of, impaired by, or with BAC of .04 percent or more.	\$2,500
	With actual knowledge of facts constituting violation.	\$2,000
	Failure to exercise due diligence to assure compliance.	1,750 2,500

Subpart C—Part-Accident Testing

219.201	Failure to facilitate conduct of required post-accident toxicological test by making reasonable inquiry and good faith judgments with respect to circumstances of accident/incident, by failing to take all practicable steps to require employee participation, or by otherwise failing to comply with Subpart C such that test cannot be conducted.	1,000 2,500
	Required employee to provide samples in reliance on Subpart C where not required (including failure to make reasonable inquiry or good faith judgment).	750 1,250
219.203(b)	Delay in obtaining samples account failure to make every reasonable effort.	1,000 2,000
219.203(c)	Place of sample collection; by whom.	750 1,250
219.203(d)	Failure to notify FRA of employee injury requiring FRA intervention.	1,000 2,000
219.205	Failure to promptly forward samples.	1,000 2,000
	Failure to provide information sheet(s) with samples.	500 1,000
	Failure to observe other requirements with respect to sample collection, marking and handling.	750 1,250
219.207	Failure to contact custodian and request assistance.	1,000 2,000
	Failure to notify FRA where FRA intervention required.	1,000 2,000
219.209	Failure to provide telephonic report.	250 500
	Failure to provide written report (sample not provided).	750 1,500
219.213	Failure to take action against employee who refuses to provide samples.	1,000 2,000
	Failure to provide timely notice and proper hearing.	1,000 2,000

Subpart D—Authorization to Test for Cause

219.301	Required employee to submit to testing without reasonable cause or without observance of procedures and safeguards.	2,000
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APPENDIX A.—SCHEDULE OF CIVIL PENALTIES¹—Continued

Section	Violation	Intentional violations ²
219.309	Failure to provide effective notice of presumption from positive urine test.	500 2,000

Subpart E—Identification of Troubled Employees

219.401	Failure to adopt or publish policy required by Subpart E.	500 2,500
	Wholesale failure to implement policy required by subpart E.	2,500
	Failure to implement as to individual employee.	2,000
219.407	Failure to file agreement or other document or provide timely notice of revocation.	500 1,250

Subpart F—Pre-Employment Drug Screen

219.501	Failure to perform pre-employment drug screen; applicant employed in covered service.	500 1,000
219.505	Failure to provide prior notice of drug screen.	500 1,000
219.505	Failure to provide notice of positive test result and opportunity for response.	250 750
	Failure to comply with other Subpart F requirement.	250 750

¹ Section 209 of the Federal Railroad Safety Act of 1970 (45 U.S.C. 438) requires the Secretary of Transportation to "include in, or make applicable to, any railroad safety rule, regulation, order or standard issued under this title a civil penalty for violation thereof . . . in such amount, not less than \$250 nor more than \$2,500, as he deems reasonable." Each day of violation constitutes a separate offense.

Section 219.9(a) sets forth the standards of liability applicable to the various requirements of this part.

² For purposes of this schedule, an intentional violation is a failure to comply in which the railroad has acted willfully and with actual knowledge of the facts constituting the violation. Knowledge of the regulations is presumed by law.

PART 212—[AMENDED]

2. Part 212 is amended as follows:

A. The authority for Part 212 continues to read as follows:

Authority: Secs. 202, 205, 206, and 207, Pub. L. 91-458, 84 Stat. 917 *et seq.*, as amended by secs. 4 and 5, Pub. L. 96-423, 94 Stat. 1812 (45 U.S.C. 431, 434, 435, 436).

§ 212.221 [Amended]

B. By amending the first parenthetical in paragraph (a) of § 212.221 by inserting "219" and a comma after "49 CFR Parts 217, 218,".

C. By redesignating paragraphs (a)(2), (a)(3), and (a)(4) of § 212.223 as paragraphs (a)(3), (a)(4), and (a)(5), respectively.

D. By revising paragraph (a)(2) after § 212.223(a)(1) to read as follows:

§ 212.223 Operating practices compliance inspector.

* * * * *

(2) Control of Alcohol and Drug Use (49 CFR Part 219).

PART 217—[AMENDED]

3. Part 217 is amended as follows:

A. The authority for Part 217 continues to read as follows:

Authority: Secs. 202 and 209, 84 Stat. 971 and 975 (45 U.S.C. 431 and 438), and sec. 1.49(n) of the regulations of the Office of the Secretary of Transportation, 48 CFR 1.49(n).

B. By amending § 217.13 to add a new paragraph (d) to read as follows:

§ 217.13 Annual report.

* * * * *

(d) The number, type and result of each test and inspection related to enforcement of the railroad's rule on alcohol and drug use ("Rule G"), to specifically include:

(1) Total number of observations of individual employees (including observations for which breath, blood or urine tests were included and observations after accidents/incidents and rule violations) and total number of employees charged with violation of Rule G or a similar rule. Provide information separately for employees covered by the Hours of Service Act and other employees.

(2) Number of breath tests conducted under the authority of § 219.301 of this title and number of such tests that were positive;

(3) Number of urine tests conducted under the authority of § 219.301 of this title and number of such tests that were positive. For positive tests indicate number for alcohol and for each controlled substance drug group (marijuana, depressants, stimulants, narcotics, hallucinogens) or other drug.

(4) Number of blood tests demanded by employees in connection with such observations and results by substance (alcohol, controlled substance drug group, other drug).

B. By amending Appendix A to add an entry as follows:

APPENDIX A.—SCHEDULE OF CIVIL PENALTIES

Section	Violation	Intentional violation ¹
217.13	Annual report:	
(d)		\$1,000 \$2,500

PART 218—[AMENDED]

4. Part 218 is amended by revising the title to read "Railroad Operating Practices."

PART 225—[AMENDED]

5. Part 225 is amended as follows:

A. The authority for Part 225 continues to read as follows:

Authority Secs. 12 and 20, 24 Stat. 383, 386, as amended (49 U.S.C. 12 and 20); secs. 1-7, 36 Stat. 350, as amended, (45 U.S.C. 38-43); secs. 202, 208 and 209, 84 Stat. 971 and 975, (45 U.S.C. 431, 437 and 438); secs. 6(e) and (f); 80 Stat. 939, (49 U.S.C. 1655(e) and (f)); 49 CFR 1.49(b)(11), (h) and (n); secs. 5(b) and (m), 80 Stat. 935, (49 U.S.C. 1654(b) and (m)); 14 CFR 400.43(c)).

B. Paragraph (d) of § 225.17 is revised to read as follows:

§ 225.17 Doubtful cases; alcohol or drug involvement.

(d)(1) In preparing a Rail Equipment Accident/Incident Report under this part, the railroad shall make such specific inquiry as may be reasonable under the circumstances into the possible involvement of alcohol or drug use or impairment in such accident or incident. If the railroad comes into possession of any information whatsoever, whether or not confirmed, concerning alleged alcohol or drug use or impairment by an employee who was involved in, or arguably could be said to have been involved in, the accident/incident, the railroad shall report such alleged use or impairment as provided in the current FRA Guide for Preparing Accident/Incident Reports. If the

railroad is in possession of such information but does not believe that alcohol or drug impairment was the primary or contributing cause of the accident/incident, then the railroad shall include in the narrative statement of such report a brief explanation of the basis of such determination.

(2) For any train accident within the requirement for post-accident testing under § 219.201 of this title, the railroad shall append to the Rail Equipment Accident/Incident Report any report required by § 219.209(b) (pertaining to failure to obtain samples for post-accident toxicological testing).

Issued in Washington, D.C. on July 29, 1985.

John H. Riley,

Federal Railroad Administrator.

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